

THE AMERICAN ELEVATOR AND GRAIN TRADE



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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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VOL. XL

431 South Dearborn Street, Chicago, Ill., March 15, 1922

NO. 9

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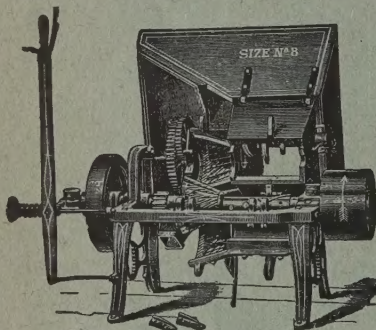
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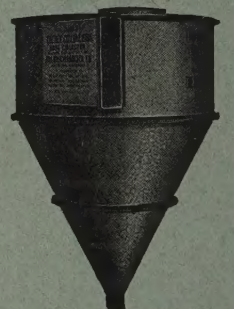
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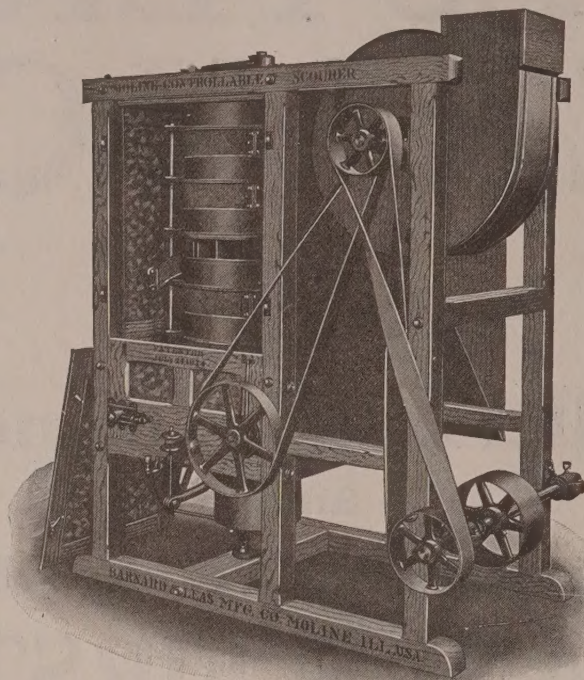
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Gives the operator complete control over the degree of scouring all grades of grain as hard as its nature will permit.

Whether scouring hard, medium or mild, the same amount of grain is always passing through the machine, and receives the same number of blows or impacts. In no sense is the grain hurried through.

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MILL BUILDERS AND
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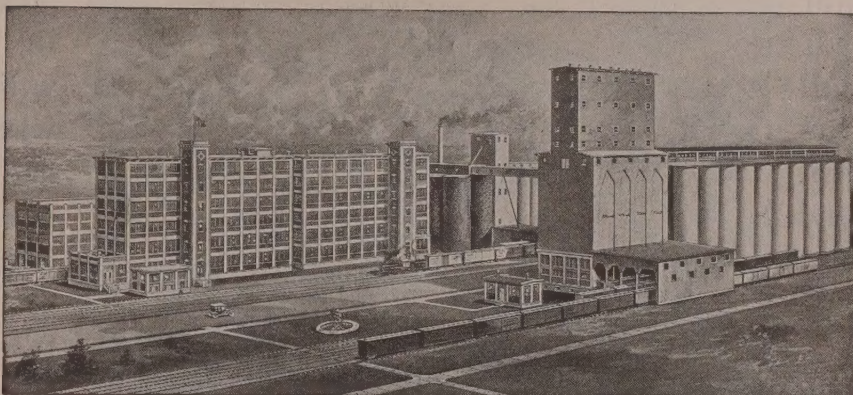
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Endurance is the Test of Quality

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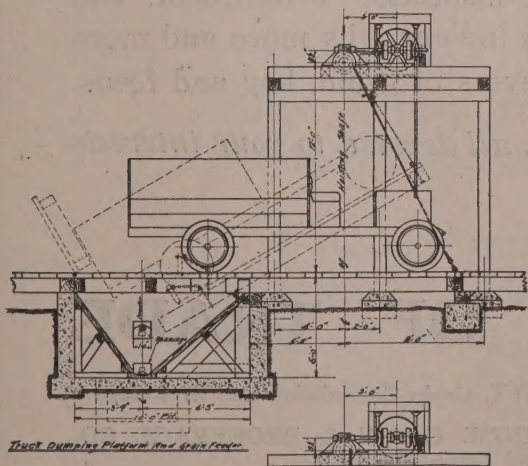
Most of the large and a great number of the small elevators and mills built in the past thirty years are equipped with Weller-Made Machinery—it is a matter of pride with us that many of our customers who, when starting, bought of us, when they were ready to expand specified for equipment made by Weller.

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Can be installed in any elevator.

Does not require the services of an expert; anyone familiar with tools and machinery can build the frame and install the lift.

Once erected it requires very little attention.

All the mechanism is overhead in full view of the operator at all times.

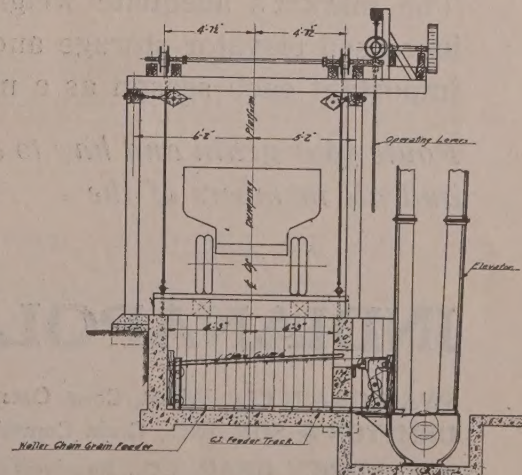
Easily controlled.

Worm gear on hoisting shaft gives positive lock at any point of lift.

No brakes; no air chambers; no hydraulic pumps.

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The Indianapolis Board of Trade

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The market's adequate weighing facilities, its efficient inspection department, and increased elevator storage and drying equipment makes Indianapolis more and more important each season as a market for shippers and buyers of grain, hay and feeds.

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Has reconsignment and transit privileges and other favorable points which insures most successful handling of grain or hay shipments.



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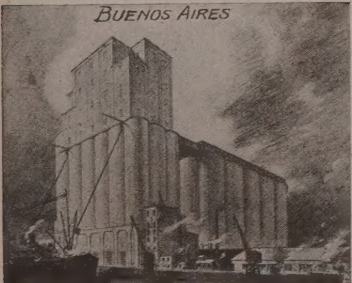
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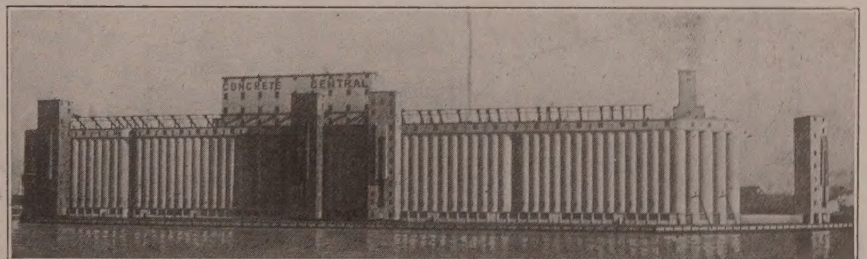


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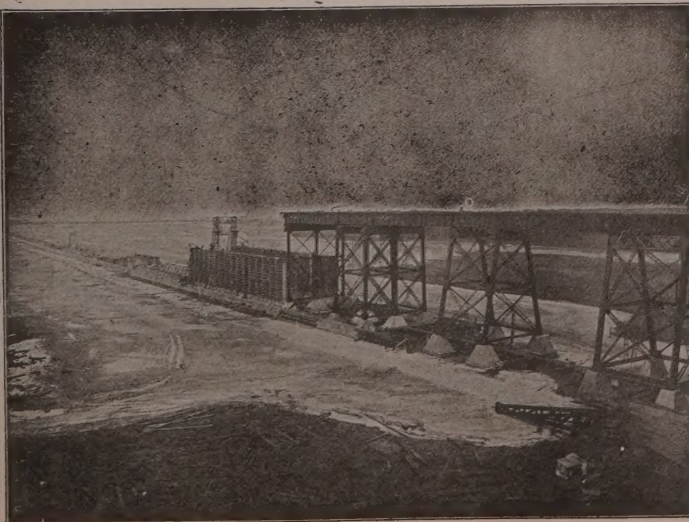
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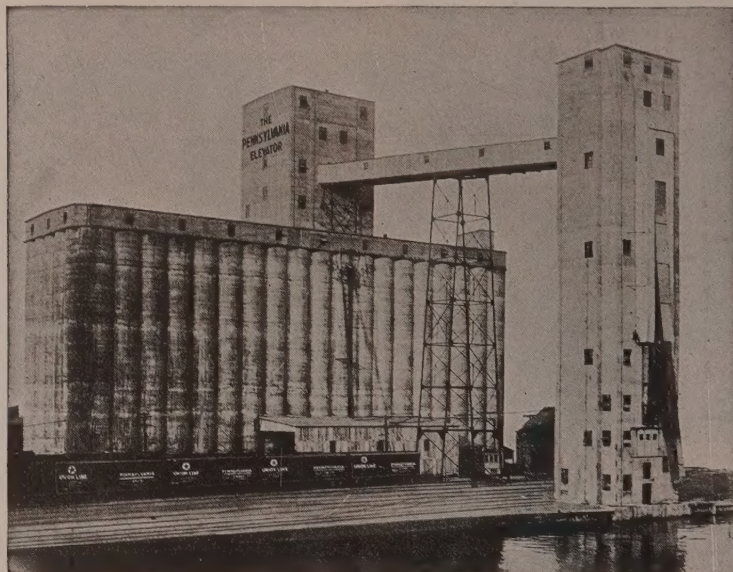


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"THERE'S A REASON"

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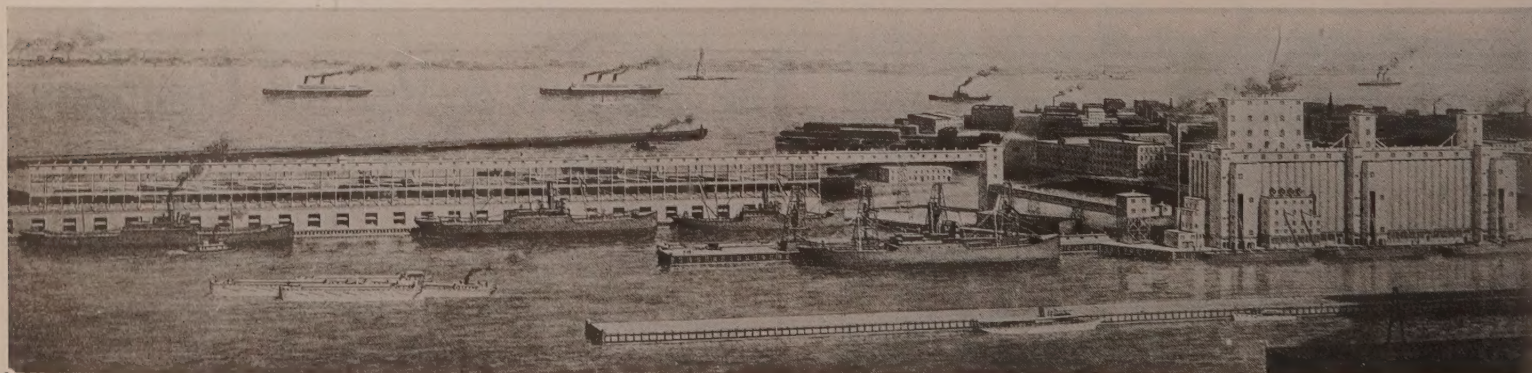
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New York State Barge Canal Terminal Elevator Now Under Construction

\$148,345.00 saved by the State of New York in placing contract for this structure with us.

ADVANCED METHODS—INTENSIVELY DEVELOPED ORGANIZATION—MADE THIS POSSIBLE

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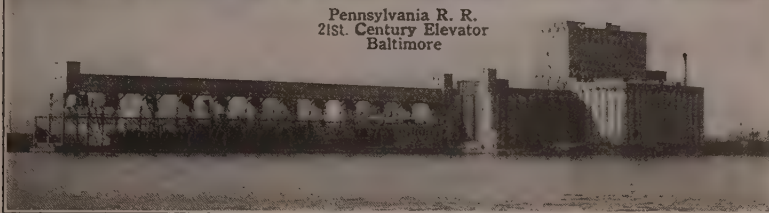


Automatic Car Unloader
Shipped 15 degrees

Grain Door Opener

Automatic Car Unloader
Reversed 45 degrees

Pennsylvania R. R.
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All-steel machines for all kinds of
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We contract grain storages, water
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COUNTRY GRAIN ELEVATORS**

Our long experience as a builder of elevators insures you an
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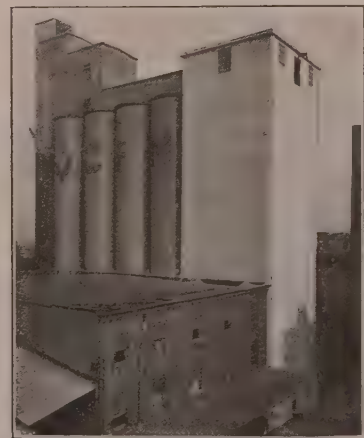
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**Designers of Grain Elevators, Flour
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Reinforced Concrete Storage built for the
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Be Prepared for the New Crop

Grain Storage Construction Costs are Greatly Reduced.

THE very decided decline in the cost of materials and labor enter-
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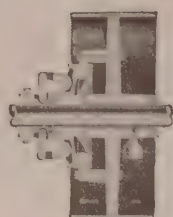
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Specialists in the design and erec-
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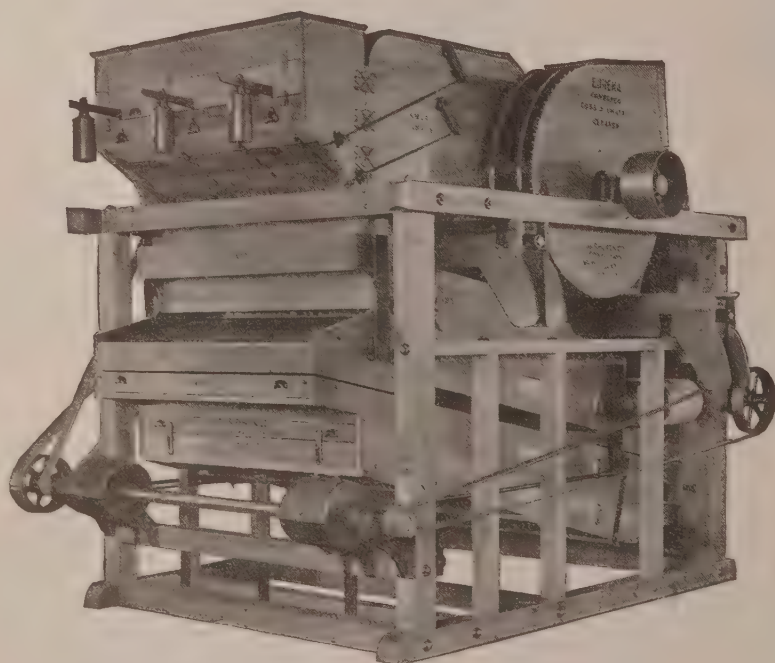
NOW IS THE TIME TO STUDY THE REPLACEMENT AND
REPAIR REQUIREMENTS OF YOUR ELEVATOR SO
THAT IT CAN HANDLE PEAK LOADS

100%



The B.S. CONSTANT MFG. CO.

ELEVATING, CONVEYING AND POWER TRANSMITTING MACHINERY
COMPLETE EQUIPMENTS FOR GRAIN ELEVATORS
BLOOMINGTON, ILLINOIS



THIS NEW EUREKA for Cleaning CORN and SMALL GRAINS is A Masterpiece of Efficiency!

We purposely ask you to forget any preconceived standards you may have had of efficiency, because we believe this Cleaner is going to sweep aside every precedent of desirability that you may have had of any machine designed for a like purpose.

This, our latest offering, represents the utmost in highly developed knowledge and skill.

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Service Satisfies



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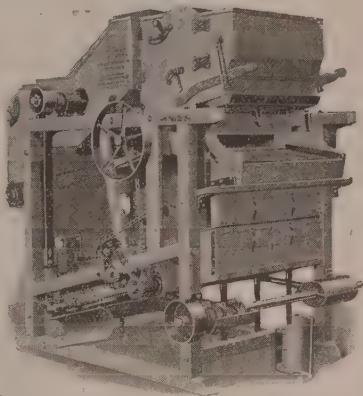
There is a Difference in Grain Cleaners

We will be perfectly satisfied with your decision, if you investigate thoroughly before buying.

The Invincible Tri-Screen Compound Shake Double Receiving Separator

Removes from 90% to 95% of Garlic in one operation.

Those intending to remodel or build new mills in the winter wheat section, would do well to give due consideration to this subject in which they are all so deeply interested.



Write for your copy of our new Catalogue No. 17.

The Invincible Grain Cleaner Company Silver Creek, N. Y.

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Used 32 Years

Put in the Elevator proved by the test of time in hundreds of mills

THE Humphrey Elevator's wide reputation for smooth, perfect operation, economy and safety is the result of 32 years of elevator building and developing.

Every detail of its construction has been perfected. Note these features: Electric silent chain drive; driving mechanism a compact, self-contained unit running in oil bath; Humphrey Patented Automatic Stop; quick and easy control; self-operating.

Humphrey Elevator

Consult our Engineering Department. We can give you dependable advice and data on the actual saving that Humphreys are obtaining in plants of various sizes. Write today.

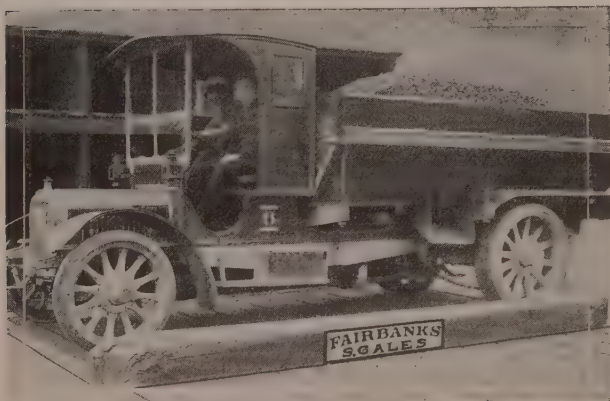
Representatives in Principal Cities

Humphrey Elevator Co.

1131 Division St., W., Faribault, Minn.



There is ONLY ONE GENUINE Humphrey Elevator



The Type "P" is Built to Weigh Heavily Loaded Auto Trucks



The Fairbanks Type "P" Auto Truck Scale is designed to withstand the pounding and jarring of heavily loaded auto trucks and to weigh them with continuous accuracy. The protection of your profits and the confidence of your customers demand that this be the scale on which your auto truck loads are weighed.

Fairbanks, Morse & Co. INCORPORATED CHICAGO

Oil Engines - Pumps - Electric Motors and Generators - Fairbanks Scales - Railway Appliances - Farm Power Machinery

Who is Going to Make Money in 1922

?

"The man who can buy at bottom prices and cut corners on costs."

Let that paragraph "soak in" until you can repeat it backward as well as forward.

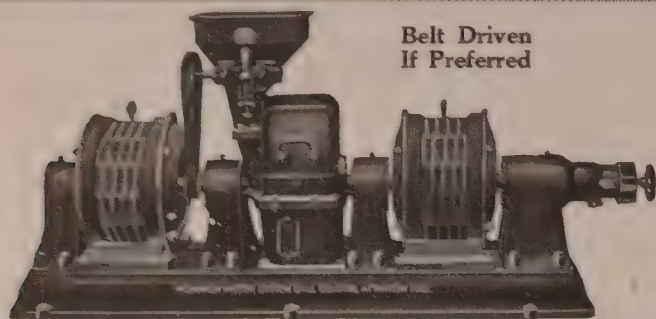
You can't cut your corners on costs with old, worn-out or obsolete machinery. Neither can it be done by antiquated methods. Stop the leaks.

Business is on the increase right now. Are you in shape to cut your costs? Have you gone over each machine? Does any machine need repairs? Have you any obsolete or worn-out machines that you are depending on? Remember you must cut your corners on costs—or else —

THE ENGINEERING DEPARTMENT of THE BAUER BROS. CO., 517 Bauer Building, Springfield, Ohio, is at your disposal—without cost or obligation—for any assistance this Department can give. Better write them today.

The Bauer

COSTS LESS PER HOUR



Belt Driven
If Preferred

A Brute for Work

BIG capacity with a minimum of power—that's the reputation of the Monarch Ball Bearing Attrition Mill.

Start it going, pull the slide in the feed spout, and—*watch results* In comparison with the amount of power consumed, the number of bushels ground per hour will surprise you.

The Monarch is a brute for work. When given an unusually heavy load, instead of balking or stalling, it shows real mettle. It rises to the occasion with remarkable efficiency.

Other merits and advantages, of which there are several, are described in Catalogue D-120. Send for a copy.

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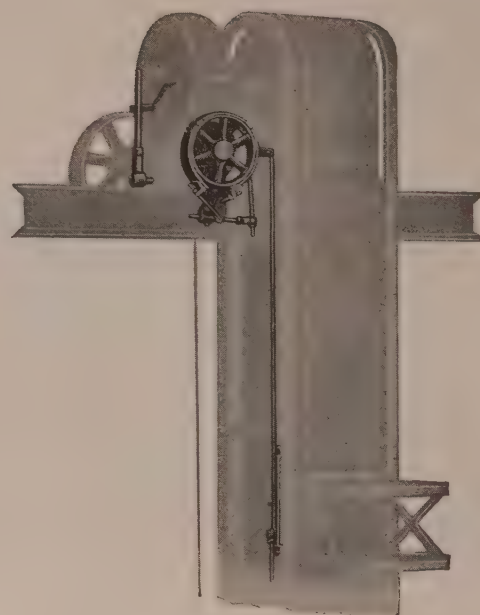
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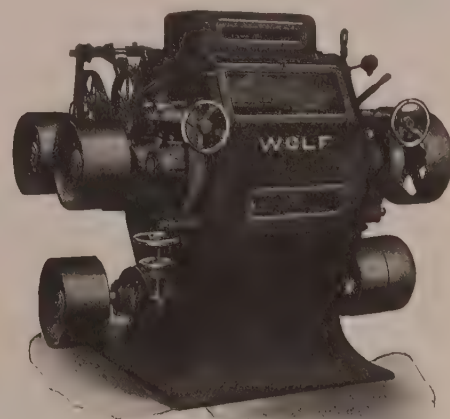
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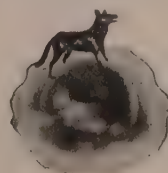
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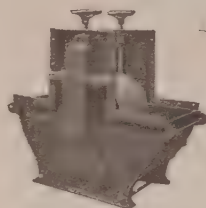
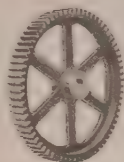
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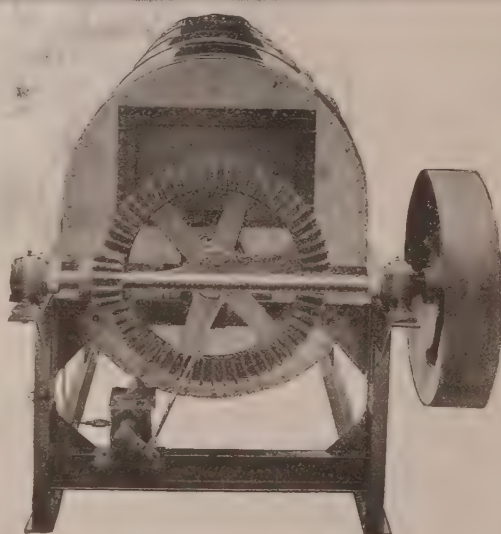
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Morse Chains Drive New Elevator Mechanism

DURING the rush season, time is such an important element in the operation of terminal elevators that engineers have been working for years in the effort to expedite the handling of grain. Undoubtedly the latest instrumentality toward this end is the mechanical car unloader. Two years ago four unloaders were installed in the Northern Central Elevator at Baltimore, and now four new ones have just been completed for the elevator of the Canadian National Railways at Port Arthur, Ontario. The elevator was designed and built by C. D. Howe & Co., who in collaboration with the Dominion Bridge Company, designed the unloader.

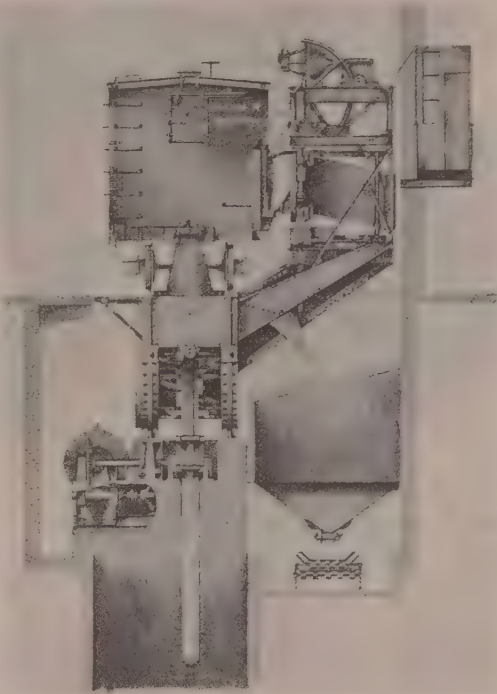
The greatest difference in principle between the Baltimore and Port Arthur unloaders, is that in the Baltimore machines the grain car is tipped side ways as well as endways. In the Port Arthur house only the longitudinal tipping is provided for. While the Baltimore unloader has sturdy supports for the car which are said to absorb all the strain of the side, tip, still the Howe company believed that there must be an undue strain upon a car in this position, regardless of the amount of support that was provided, and designed an unloader in which this side tip was unnecessary. The relative merits of the two designs are a matter for expert engineers to determine, grain dealers are chiefly interested in the fact that both of them work and the railroads have made no complaint about either one as to undue stress on their rolling stock.

It is significant that in this Port Arthur elevator where the element of time-saving was considered of such importance, an integral part of the power transmission to the ponderous mechanism of the unloader should be by Morse Silent Chain Drives. The expense of such an installation would have been wasted if the power to drive it should fail. Naturally every means of transmission was scrutinized with the utmost care, in order that one might be selected which could be depended upon, at all times and under all conditions of atmosphere and temperature, to give unfailing and exact service; that the operators could trust and their expectations. Under such conditions it is a matter of no little pride to the Morse Chain Company, that its drives should have won out over the entire transmission field.

The elevator of the Canadian National Railways is on the water front and is so located that there is no through trackage. The unloading shed was placed at the shore end of the working house, and the loaded car tracks and empty car tracks were side by side. Each yard track has a capacity of 30 cars. The spring switch near the unloaders is open to the empty track, and the empty cars are discharged and clear themselves by gravity. Loaded cars are pulled to the unloaders by car pullers, specially designed cable grips being used for attaching the car to the moving cable. Loaded cars may be set into the elevator yard and empty cars removed without interruption of the unloading process.

Each unloader consists of a bridge made of two built-up steel girders rigidly braced together. The lower part of the girders is formed into a circular tread which rests on steel tracks supported on a heavy

concrete foundation. Lugs on the tracks mesh with slots in the girders to insure proper alignment at all times, and a roller at each end of the bridge operates in a steel guide set in the concrete struc-



END ELEVATION OF THE UNLOADER

ture of the unloader foundation as a further aid to keeping the bridge in alignment.

The tipping machinery consists of an electric motor connected to a ram at each end of the bridge. By means of this the bridge can be rocked to an angle of 45 degrees in either direction. End locks

Bumpers for centering the car on the bridge platform and for holding the car in position during the tipping operation are of the collapsible type, formed by heavy steel casings, hinged and supported on a crosshead in the guideway. These are operated by large diameter screws driven from a motor located near the center of the bridge. The bumpers hold the car by clamping over the drawbars.

The grain door remover consists of two steel levers cast into gear segments and operated by a motor connected to a counter shaft having a steel pinion at each end. The door remover may be quickly adjusted to varying heights of car floors. In operation the remover forces the door inward without injuring it, and by a continuous motion carries it inward and upward to the roof of the car where it remains during the unloading operation. Afterward, as the remover is drawn from the car, the door drops to the car floor.

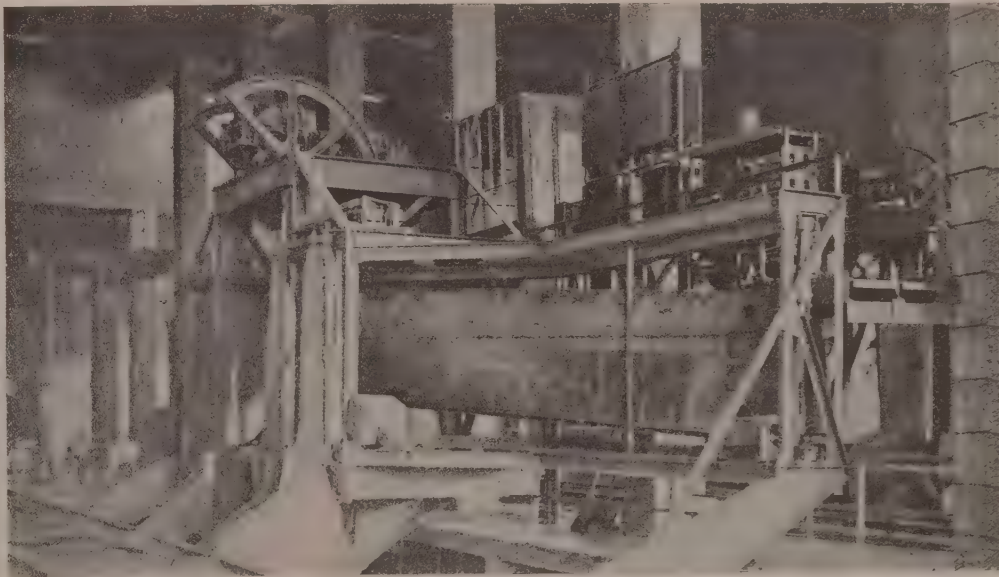
Two deflecting baffles are provided, one at each side of the car door, each operated by a motor connected to a drum shaft. In order to provide for variation in the height of car floors, the forward end of the baffle is adjusted by means of a large nut supported in a casting under the baffle guideway. As the baffle moves into the car it is lowered until it rests on the car floor, fitting tightly to the car floor and to the far side wall of the car. Deflecting plates are arranged under the car door to carry all grain well to the center of the receiving hopper, and flexible deflectors are arranged to prevent leakage of grain along the side of the car.

The operator's cab is located directly opposite the car door and is provided with glass windows so that the operator has an unobstructed view into the car at all times during the dumping operation. With an electrical control board in a convenient position before him he is at all times master of the situation.

The safety factors of the mechanism are developed to the maximum. The rocking bridge is in stable equilibrium at all times, and even if breakage should occur in the tipping mechanism the bridge will immediately come to a horizontal position without damage. Motors are equipped with solenoid brakes, and operations are electrically interlocked so they cannot be carried out in improper sequence.

In operation a loaded car is drawn onto the unloader and centered and blocked. The end pins are withdrawn and the door remover applied. About 10 per cent of the grain now runs out of the car. The cradle is tipped 20 degrees in one direction without the insertion of a baffle and an additional 25 per cent of the grain flows out. One baffle is now inserted and the car tipped 45 degrees in the opposite direction.

This results in removal of a total of about 85 per cent of the grain. The one baffle is withdrawn and the other inserted and the car is tipped again in the first direction to an angle of 45 degrees and the remainder of the grain runs out. The baffle is withdrawn, the car leveled, door remover taken out, end pins inserted, bumpers dropped, and car is ready for final inspection and removal. In four minutes a car of wheat can be unloaded. Certainly an achievement of note.—Advertisement.



CAR UNLOADER INSTALLATION AT ELEVATOR OF CANADIAN NATIONAL RAILWAYS AT PORT ARTHUR, ONT.

are provided for locking the four corners of the bridge platform to the foundation. These locks consist of heavy pins which slide into cast iron shoes set in the foundations, the pins being simultaneously operated by a five-horsepower motor.

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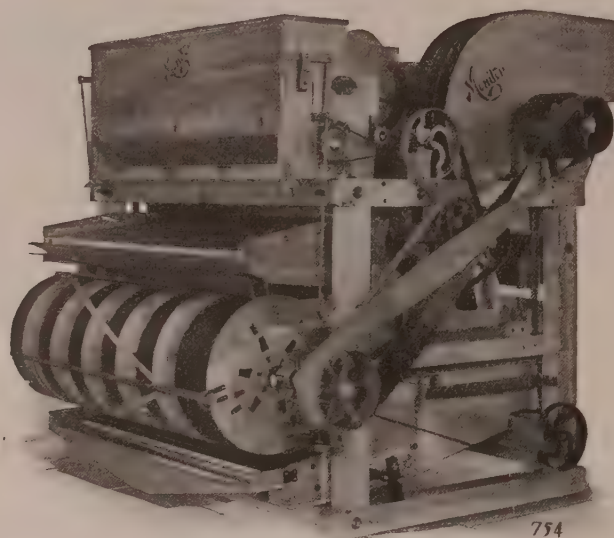
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when the next car of mixed wheat and oats comes in?

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VOL. XL

CHICAGO, ILLINOIS, MARCH 15, 1922

NO. 9

Handling Foreign Grain at Liverpool, England

Plants of the Liverpool Grain Storage & Transport Company Equipped to Handle and Condition Vast Quantities of Grain from All Parts of the World

LIVERPOOL is the strategic grain center of the world, with certain limitations, just as Chicago is the greatest cash market and the greatest futures market. Liverpool commands its great importance because it is the chief grain port of the United Kingdom, which absorbs by far the greatest amount of the world's surplus grain. In 1921 the United Kingdom took from us 63,939,251 bushels of wheat, 16,554,050 bushels of corn, and 3,997,691 barrels of flour, besides great quantities of barley, rye, and oats. From other exporting countries it takes amounts in even greater proportion to their total exports.

Inasmuch as the price paid for surplus sets the price for the entire crop, again with certain limitations, Liverpool is the world's grain price fixing center. Local conditions always have an influence which modify this, but in the broad sense it is true. At the present time a contradiction apparently exists in this country, but it is only apparent. Pacific Coast wheat is nearer to Liverpool than Chicago, measured in cost of transportation, but Coast grain is cheaper than Chicago. This is due to the fact that the Pacific Coast has not enough industries to absorb its wheat production and rail rates do not permit competition with Central States wheat, so that the Coast surplus is really distress stock, or is so regarded. There is no surplus of Central States milling wheat and mills are already paying high premiums for it. Chicago wheat at the present moment, due to our larger exports, is largely independent of foreign demand and will probably manifest this independence later.

But, in spite of varying conditions from year to year, Liverpool maintains its importance. Its wireless messages direct a large proportion of the cargoes afloat, telling them where to deliver their grain, and its grain merchants have their fingers on the pulse of the world, in production, in demand, in finance, and in politics. Viewing the grain trade in

this broad light makes local issues, over which we fuss so much, seem rather small. It also makes various suggestions for controlling grain prices seem as futile as they are in fact.

Naturally Liverpool is well equipped to handle the volume of grain which comes to its port. The most extensive facilities are controlled by the Liverpool Grain Storage & Transport Company, Ltd., some of whose plants are shown in the illustrations on this and following pages. But before introducing details of the elevators, it might be of profit to tell something of the manner in which grain is handled

fleet of barges which moved from dock to dock, lightening the grain to the company's elevators. As many as 80 of these barges were employed at one time, and the transferring equipment was so slow that a great deal of unnecessary time was consumed in the process. The barges are still used, but not nearly so many are required since the improved facilities were provided.

The storage elevators of the company had a capacity of 7,042,500 bushels, but its handling equipment was antiquated. Before the war plans for enlargement of facilities were completed, but slow progress

was made in war time. In 1919, in spite of the high cost of material and labor, a building program was started which once more puts Liverpool among the leading grain ports. This extension of facilities was necessary, for improvements at other ports in England were taking the grain business away from Liverpool, so that it was a clear case of meeting this competition or being relegated to the second class of ports. The improvements consist of two transit elevators, a hospital elevator, complete co-ordination of the storage and transit houses, and a revolutionary change in rail operation. Up to this time English



TWO OF THE STORAGE HOUSES OF THE LIVERPOOL GRAIN STORAGE & TRANSIT COMPANY, LTD.

at the port where much of our grain goes.

To the average American, familiar with grain handling on the Great Lakes, a grain cargo is thought of as being a boat load, usually of one kind of grain. As a matter of fact the great bulk of export grain going to Liverpool is taken as ballast for a boat carrying more profitable but more bulky merchandise freight. Grain is often only a by-product of the ocean carriers' business and as such is treated with scant respect. A vessel would berth at Liverpool at a merchandise wharf, and if the consignee wanted his grain he could come and get it, certainly the vessel would not shift berth for so unprofitable a part of its cargo. The grain storage company, as a consequence, had to employ a large

railroads were not equipped to handle grain in bulk to any extent. Freight cars (or waggons as they are called over there) were not grain tight, and everything had to be sacked for shipment. Through the influence of the Liverpool Grain Storage & Transit Company, a large number of bulk grain cars were built and have largely replaced the sack carriers which serve the larger mills. This change alone has made a great difference in the company's operations, for it furnishes grain to many inland mills. The bulk of its business, however, is with the port mills and these are reached by barge or other vessel loaded in bulk.

The two storage elevators are old buildings of brick construction, the walls of which are, in some

places, six feet thick. They are arranged in comparatively small units, which can be marked, in the first illustration, by the towering elevator heads, one for each of the units. This gives a great deal of flexibility in the handling of grain through the plant, but would not be an economical way to build at present. Considerable change was necessary in these older buildings to link them up with the new transit elevators, but it was done successfully, and so far as handling is concerned the storage elevators are modern and of rapid movement.

The two new transit elevators, one of which is shown in the illustration, are of reinforced concrete construction throughout. They are nearly identical in size and shape, each being 200 feet long, and the main elevator towers 130 feet high. The receiving equipment is thoroughly up to date in every particular and is one of the best in the United Kingdom. No. 2 elevator has two fixed and two traveling marine legs, with a total capacity of 600 tons per hour; No. 1 elevator has only the fixed legs at present but can be equipped like No. 2 if necessary.

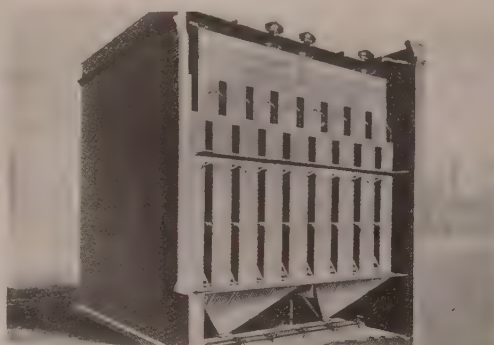
The grain is elevated from the hold of vessels or barges, and is carried by belt conveyors to the main elevator boot, and thence to the top of the building. Here it passes over one of four automatic scales and is distributed to the bins. From the bins the grain can be spouted to barges, to cars, or to the conveyor leading to the old storage elevators.

The two transit elevators are connected by belt conveyors so that grain can be transferred from one to the other for shipping purposes. Between the transit elevators and the storage houses is a distance of over a quarter of a mile taken up with a public roadway and railroad tracks. A tunnel was constructed under this entire distance, the tube being eight feet high and 10 feet wide. It contains two reversible belt conveyors so connected with the various elevator legs that any one of the 600 bins in the plant is immediately available for storage or for turning grain that is out of condition. Grain can be turned within the house at a rate of 1,700 tons per hour. If any grain is received at the plant in doubtful condition it is immediately sent to the hospital elevator, a separate structure equipped with coolers and other conditioning apparatus.

But this is only part of the Liverpool company's storage. At the Coburg Docks on the south side of Liverpool is another plant with a capacity of 60,000 tons. It is a complete unit in itself, is thoroughly up to date, and besides the handling equipment the plant has a testing laboratory which meets every requirement of the dealers and millers who are interested in the grain which passes through the com-

ment. The ground plan of this house is illustrated below and gives a good idea of its up-to-date facilities.

Connected with the Coburg Docks plant there is a



HESS DRIER IN THE LIVERPOOL ELEVATOR

Hess Drier of a capacity of from 1,000 to 2,000 bushels per hour, depending upon the amount of moisture that has to be extracted from the grain

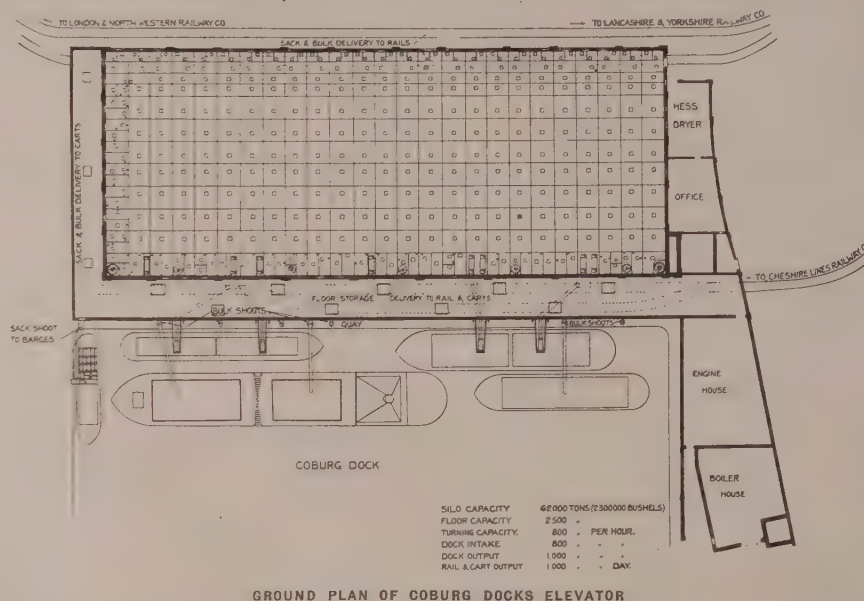
gave the contract to the Hess Warming & Ventilating Company, and in 1915, in spite of the war, a representative of the company went to Liverpool to install it. The drier is housed in a brick structure and has given the highest sort of satisfaction ever since it began operating.

The Liverpool Grain Storage & Transit Company, Ltd., is one of the most important factors in the grain trade of England, and has been the pioneer in the United Kingdom in a great many improvements which mark the company as being a progressive and forceful entity, one which the millers of Great Britain must appreciate highly for the service that is given as a part of its routine work.

THE CARE OF SCALES

BY TRAVELER

The scales in an elevator should receive constant attention, and should be shielded in every possible way from harm; but, unfortunately, this is not generally the case. Too frequently the wagon scales are without covering and are left entirely to the mercy of the elements, so that they become rusted



GROUND PLAN OF COBURG DOCKS ELEVATOR

passing through it. The installation of this drier, which is the largest pneumatic drying plant in the United Kingdom, was contracted for in 1914 when the various improvements were first decided upon

or sagged out of shape, and thus can no longer weigh accurately.

The average elevator man thinks it is all-sufficient to have the local inspector go over the scales and then affix his official seal. When this is done, he dismisses the matter from his mind, and is ready to swear by his scales to anyone that comes along.

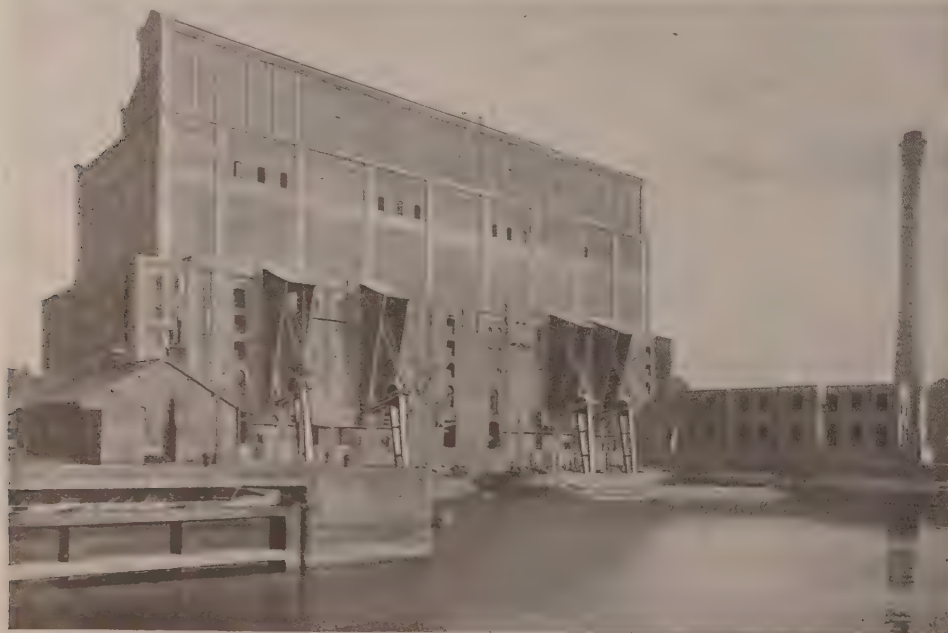
Sometimes this will work out all right; but often there is still something wrong with the scale, which the inspector's method has failed to show up. For instance: The scale may weigh correctly up to the capacity of the inspector's test-weights; but beyond that it may begin to bear at some point, so that as the load is increased the error in weight becomes proportionately greater.

Such a defect can usually be discovered by the intelligent use of a spirit level. If floor, sides and standards of a scale are perfectly level, there will be little chance of it bearing at any point—but it must be level both light and fully loaded.

The writer knew an old German millwright who could find defects in scales after experts had declared them perfect; and his only tools for locating the trouble, were a spirit-level and plumb-bob.

As a rule, he found that the most serious faults in the action of scales were due to the simplest of causes. Often the trouble was not in the scale itself, but in the hopper which it supported. For instance: One day, we were trying to locate the source of trouble in a scale with a hopper capacity of about 150 bushels. When light, the scale worked perfectly, but would not do so loaded. The hopper did not discharge through the center—due, no doubt to lack of fall—but, instead, the bottom was hopped all to one side, and the grain went out through a short spout which nested into another.

At some time, the elevator man had found it necessary to repair this latter spout, and in doing



COBURG DOCKS ELEVATOR

pany's hands. In this laboratory all the grain that comes to any of the company's plants is tested as a matter of routine, and the laboratory has proved itself to be a most valuable part of the firm's equip-

ly the company. In January of that year Edward Paul, director of the company, came to this country and for six months traveled about inspecting drying plants of all kinds and in many places. He finally

so had gotten it out of position, so that as the hopper was filled, its short spout rested against the other, and thus caused the scale to weigh incorrectly. A few minutes work with a hammer and chisel soon remedied the difficulty.

In another case, the working parts of a hopper scale were suspended from a frame, standing four feet above the floor and composed of timbers nearly a foot in thickness. All parts of the scale were easily accessible, and had been tested and found *okeh* by the sealer. Nevertheless, car-loads of grain weighed through these scales would invariably fall short in large amounts.

The solution of this was also very simple. It developed that the elevator was equipped with a power loader, and for want of a better place, this loader had been "stayed" to the heavy frame supporting the scale. This loader would, of course, be in operation when the elevator man was weighing grain into cars, and as it revolved at a high rate of speed, the consequent vibration prevented the scale from weighing properly. As soon as the loader was "stayed" to some other part of the building, the scale worked perfectly. Of course, when the sealer had been there to test the scale, the loader was not in operation, and the difficulty, therefore, was not in evidence.

So, by all means, keep your scales covered up, leveled up, and also use your eyes and a little common sense toward discovering the little things which will sometime cause a perfectly good scale to give a bad account of itself.

U. S. MONTHLY SUMMARY OF EUROPEAN SITUATION

The European crop outlook has become more promising during the past 30 days. The recent abundant rainfall provides adequate subsoil moisture after a serious deficiency extending over a period of six months; this, with the mild weather, favors the progress of the winter crop of western Europe. Fall sowings were further helped by snow covering the Baltic States, Germany, Poland, Yugoslavia, northern Italy and Rumania. The large reduction in the acreage of winter grain in France will probably be offset by increased spring sowing.

Crops are reported from fair to good in all principal producing countries except Czechoslovakia,

to draw heavily upon imported supplies of wheat and flour.

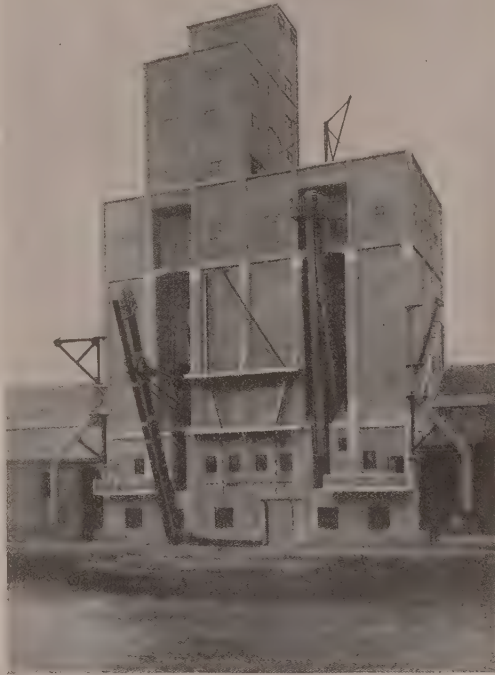
The Austrian food shortage is undergoing little improvement, though crop prospects are encourag-

removal of Government restrictions. The demand for Hard Patent American wheat flour in the Baltic States is well maintained.

British agriculture is disturbed by a serious outbreak of foot and mouth disease, the worst cattle epidemic since 1883, which threatens the prospective meat and milk supply of the country. Its continuance will tend to stimulate the demand for American pork products and condensed milk. British purchases of American refined sugar during January were unusually heavy.

While the supplies of the wheat exporting countries considerably exceed actual import requirements of European countries, a tendency toward closing this gap is plainly discerned. England, the principal purchaser, has been living from hand to mouth, with port stocks now unusually low. The opinion is gaining ground that Russia, by its own shift and the assistance of organized charity, will prove a strong factor on the purchasing side. Experts estimate such purchases during the next six months as high as 35,000,000 bushels. This, together with movements of American exchange in favor of the principal purchaser, and continued discouraging reports of the condition of American Winter wheat in the Middle West confirm the hardening tendency of the European grain market. For six months the market showed a trend in favor of the buyer; now it displays a tendency in favor of the seller. The principal bearish factor is the prospect of large shipments from the Southern Hemisphere. The new Argentine crop is reported of superior quality sound and heavy wheat, and further being sold on an attractive basis of drafts at 90 days' sight covering full amount of bill makes a strong appeal to the British millers. The price of corn improves with that of wheat. Better feeling prevails, particularly in the forwarding business.

British trade returns for 1921 reveal to a surprising degree the strength of American food-products sales. There was a gratifying increase in the



NO. 1 TRANSIT ELEVATOR, LIVERPOOL

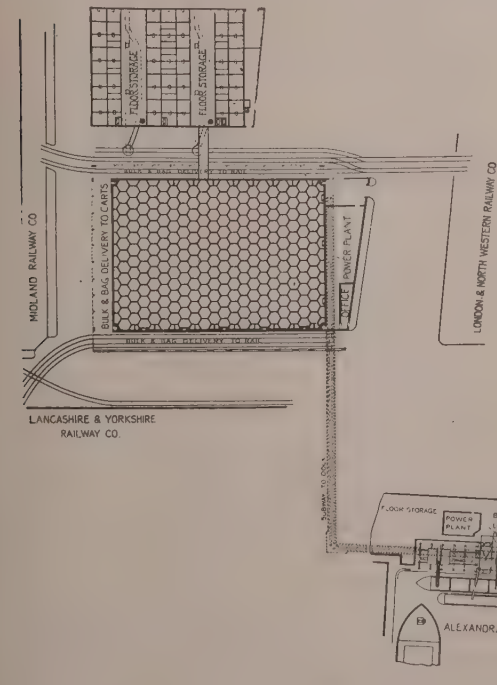
ing. Coarse cereals are being widely employed as a substitute for wheat, stocks of which are extremely meager. Reduction of food subsidies in January tended to raise prices and lower consump-



DISTRIBUTING FLOOR OF LIVERPOOL STORAGE ELEVATOR

tion. The shortage of the forage crop in Germany drives the farmers to slaughter their livestock. Meat prices have not advanced, therefore, in proportion to other foodstuffs along with the depreciation of

value of business in the three principal cereal items (wheat, barley, and corn) as over 1913. The value of wheat imports doubled, and that of barley tripled. Corn showed a gain of £1,500,000. The decline in oats was governed by the law of diminishing consumption, as the horse is displaced in urban centers by internal-combustion engines. American sales of pork products to the United Kingdom show a considerable advance in bacon, ham, and lard. This trade was valued at nearly £19,000,000 more in 1921 than in 1913. The vigorous growth of American foodstuffs trade in the British market in a year of severe business depression is worth attentive consideration.



GROUND PLAN OF A PORTION OF THE LIVERPOOL PLANT

Turkey and Rumania. The outlook is so poor in the latter country that it is unlikely to play more than a minor part during this year in the exportation of wheat, while Turkey in Europe must continue to depend upon coarse grain from neighboring states and low-grade American flour. Czechoslovakia, contrary to earlier expectations, probably will continue

the mark. Reduction in supplies of fresh milk stimulates the demand for imported condensed milk.

The acreage of Winter wheat and rye in Poland shows a marked increase. With continuance of favorable growing conditions, the country bids fair to shift from an importing to an exporting basis. Consumption, however, shows an increase with the

AMERICAN farmers were not the only ones to force down the wheat market with excessive shipments at threshing time. Canadian farmers did the same thing. Between harvest time and December 1, 141,475,159 bushels reached the Head of the Lakes, 41,000,000 bushels more for the corresponding time last season.

The Independent Dealer's Advantage

Some of the Inherent Weaknesses in Co-operative Grain Handling which the Independent Dealer Escapes

By L. W. RAILSBACK

IF THE country grain merchant who is fearful of the effect upon his business of the co-operative craze, rampant throughout the nation, would but pause to realize that any claim to merit of co-operation, as thus far demonstrated, is based largely upon popular conception, rather than upon proved economic worth, I am of the opinion that he would be much less apprehensive of results.

Notwithstanding the beautifully beneficent and altruistic guise in which its exponents would picture to us the *motif* of co-operation, its true appeal is to the race-old Adamic trait of selfishness. Accustomed to look upon all middlemen as predatory, victim of a Tally-horn born of inexperience and suspicion and fostered by wilful misrepresentation, it is small wonder that the farmer falls an easy prey to the machinations of the self-seeking organizer, whose favorite lure is a play at once upon the credulity and the cupidity of the farmer by a portrayal of fictitious, fanciful profits exacted from his product in return for negligible service.

So blinded is the devotee in some instances that he will submit uncomplainingly to the gross mis-handling of his business after a manner that he would not tolerate in the independent merchant. It is this predilection to their own institution on the part of those to be served, an attitude of mind that assures to the co-operative gratuitously a healthful volume of business such as can be attained by the independent only by demonstrated merit, that to my mind constitutes the only serious, inherent menace of co-operative competition thus far apparent.

No one will deny that the promoter phase of co-operative organization is a fearsome thing, the mere contemplation of which tests the nerve of the timorous; but when the stout-hearted come to grips with the reality its phantom terrors vanish as mist before the sun.

There is, fortunately, no privileged road in the grain business. Successful operation exacts of the co-operative no less rigorous adherence to prescribed restrictions and limitations than it requires of the independent; and a failure to observe them results no less grievously to the one than to the other. That being true, it follows naturally that, unless co-operative agencies are aided by discriminating legislation, they can avail themselves of no marketing facilities superior to those accessible to the independent, so that the comparative merit of the two plans must be determined by the quality of service rendered, which after all is dependent largely upon the personal equation in management.

In that connection the independent operator should bear in mind that as he envies his co-operative competitor his easy patronage, so the latter envies him, his independence. Usually a fine fellow, the co-operative manager aspires to the creditable and profitable conduct of his stewardship. Too often, however, he is harassed and hampered by the ill-advised dictation of uninformed directors, whose chief concern is likely to be not so much the welfare of the institution as a coveted return on the marketing of their individual grain, even at the expense of an abuse inflicted upon the institution.

Conscious that he is not to be allowed to conduct the business solely in its own interests, and sometimes subjected to insidious pressure from sources of authority, the plight of the co-operative manager can hardly fail to result in an impairment of morale and a consequent lessening of efficiency. He lacks, too, the confidence of the independent born of a consciousness that his knowledge of the business has evolved as a result of costly experience personally applied. Perhaps in the stress of storm the independent may have envied the other his privilege of abandoning ship when disaster threatens, to pass blithely on to the next scene of operations. In time, however, he

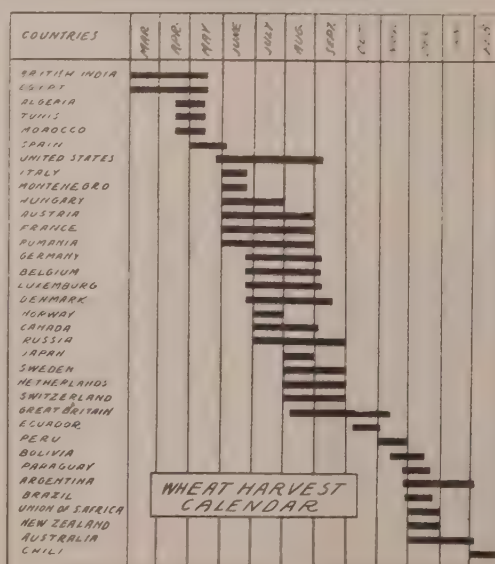
comes to appreciate that the stimulus of personal risk has been an invaluable aid to the acquirement of niceties of perception indispensable to profitable conduct of the grain business.

The country grain merchant is fortified by certain knowledge that dependence in the quality and merit of his service is not misplaced; and it is obvious that in competition with the co-operative he does not cut the sorry figure that his detractors would have us believe. That he has survived ruthless attacks directed at him and at his vocation is in itself no mean tribute either to his ability or to his usefulness. In general he is accorded the esteem of his fellows, and is favored with a gratifying volume of business from many of the most substantial farmers of his community, as well as from non-resident landowners, both of whom, because of wariness, natural or acquired, have refused to identify themselves with the local co-operative organization.

To this patronage usually must be added a considerable number of liberal-minded and highly desirable customers, who, in response to persistent appeal to class loyalty have subscribed for stock in the co-operative, but who because of personal friendship and in recognition of meritorious service, almost invariably entrust their business to his care. The aggregate is still further increased by an occasional defection of a disillusioned stockholder. Not the least cause for the independent's self-congratulation is the marked absence from his ranks of the exacting, fault-finding patron, the potential trouble-maker, who gravitates to the co-op. as inevitably as water runs down hill.

And so I submit that the apprehensive independent may well ponder the apparent supremacy of individualism, the superiority of personal initiative and effort stimulated to its best by a sense of personal ownership and responsibility. Just as self-preservation is the first law of nature, so is self-interest the lodestone of unsparing effort. It is the irony of co-operation that it, too, works best when its exponent sees an opportunity to help himself; and the more apparent that fact becomes, the faster approaches the dread *déte-noire* of co-operation, the disintegrating tendency proverbially expressed as the inability of any group of farmers to "stick together," which in reality is but the reaction of disillusionment upon too credulous expectation.

It is significant that on every hand discerning individuals closely allied with established co-operative organizations and the recipients of its alleged benefits, are becoming more and more unresponsive to the ravings of the co-operative promoter;



—Soil Products Bulletin, First National Bank in St. Louis

and to those fed up on the inspired comment of the subsidized press it would be refreshing to go among the farmers and hear at first hand the disparaging comment of typical representatives of that great majority of intelligent, conservative farmers whose restraining influence is exerted only when some wild project of the fanatic seems imminent of accomplishment, as witness the fate of those twin asininities, the Lantz Bills.

The survival of the middleman is assured, then, not by a conjuring from the void of any miraculous power, but by an unfailing application of those factors within his own control that make inevitably both for success and for the farmer's recognition of his usefulness—energy, industry, and conscientious service intelligently performed. He should carry on in the serene consciousness that so long as the co-operative organization must entrust the conduct of its affairs to human agency it will be at a disadvantage until the Creator shall have decreed His handiwork faulty, and shall have fashioned human nature in a different mold.

REPUDIATES THE GRAIN GROWERS

P. A. Lee of Grand Forks, secretary of the North Dakota Farmers Grain Dealers Association, in his report to that organization on February 28, had something to say regarding the U. S. G. G. which will be of interest to all dealers, and particularly to Senator E. F. Ladd who was one of the Committee of Seventeen and one of the most enthusiastic backers of the Grain Growers, the outcome of the deliberations of that body. Mr. Lee said:

One of the problems that has come before a large number of our members during the past year is the report of the Committee of Seventeen, sometimes known as the Committee on Terminal Marketing. No doubt the question of the position taken by the officers of your organization has occurred to you.

In this connection we deem it but right at this time to make known your secretary's position, at least, and the secretary believes that in voicing his opinion he has the support of the entire membership of the Executive Committee. That the farmers elevator companies especially have a right to terminal marketing, there can be no question about, and the writer verily believes that the time is fast approaching when it will be necessary for them to do so.

However, the principal question before the farmers elevator companies today is that of whether or not a selling agency should be organized and operated in competition with the regularly established exchanges that we now have and which have heretofore operated, we believe, with a marked degree of success, and which certainly have been a wonderful improvement over the marketing system that prevailed previous to the organization of such exchanges.

Let it also be said, and we do not believe there is any room for argument against the statement that the organization and operation of farmers elevator companies was an equal improvement in local marketing over and above the line elevator system which prevailed before the farmers organized their own local elevator companies. That the venture of organizing local farmers elevator companies has been a successful one is equally true.

Inasmuch as the farmers elevator companies have been successful we believe it is a sound argument that any steps taken towards entering the terminal marketing field the local farmers elevator companies should and must be the nucleus from which terminal marketing agencies are established. In other words, the farmers elevator companies must be the foundation upon which a sound organization is built.

This brings before us the marketing scheme as outlined by the Committee of Seventeen and which resulted in the organization of the U. S. Grain Growers, Inc. The officers of your organization have not taken a public stand on the question of the U. S. Grain Growers, Inc., for the very simple and sufficient reason that the organization did not wish to do anything that might influence the probable success or failure of their plan.

On the other hand, the officers felt, as they do now, that the contracts submitted by the U. S. Grain Growers, Inc., have not been promulgated with a view towards protecting the best interest of the local farmers elevator company, but on the other hand they have undertaken to contract for grain direct with the grain grower, with cross contracts with the local farmers elevator company, independent dealer, or line company as the case may be, for the handling of such grain, allowing such company or dealer merely enough handling charge to pay the necessary cost of handling such grain without any apparent intention of allowing anything for depreciation, reserve, or interest on the investment.

Under these contracts local elevator companies are not permitted to buy the grain and sell it again where they can get the best market. They are obliged to re-

According to the officers of the organization, based upon the present membership, the sales company will have 110,000,000 bushels of grain to market. Just how the operations of the sales company is to be financed does not appear in the announcement. That other subsidiary, the Finance Corporation, has been refused permission to sell stock by several

state blue sky commissions, because it had too much Ponzi and Bischoff in its cosmos.

We understand that the Grain Growers are opposed to hedging in which case the company will have difficulty in using the paper of that 110,000,000 bushels through the regular banking channels. The alternative will be to make the grower wait for his money until the grain has been disposed of. This

will, of course, please the growers, and will somewhat handicap the vaunted "orderly marketing."

We suspect that the move was made to quiet the growing suspicion among farmers that the whole Grain Growers movement is designed to supply soft berths for the officers and profitable jobs for a flock of organizers. As Goldberg says: "It doesn't mean anything."

Government for Farmers Only

An Attempt to Make the Government Responsible for Farmers Debts Through a Proposed Amendment to the Farm Loan Act

By EARLE W. GAGE

MANY super-socialistic dreams have been dreamed, and indications are that a few will be put across at the expense of the country in general, if independent tax-payers do not immediately manifest their wishes to their Congressmen and Senators at Washington. The latest fad of having the Government perform strictly class business for the farmer is the suggestion of the Federal Farm Loan Board that the farm loan system, comprising 12 Federal Land Banks and 4200 co-operative national farm loan associations, be made a part of the Federal Government.

This means not only that a vast and menacing political machine would be created for the farmer, at Government expense, but also that Uncle Sam, a kind and too often over-considerate gentleman, would occupy a position of footing the bill for a special class, a bill that should, by every principle of sound business, be paid by the individual who enjoys the fruits of ownership and service.

The war seems to have given us an over-allotment of long-haired, super-socialistic dreamers, and it gives the sane and common sense citizens a double responsibility in combatting these efforts to turn the United States Government into a clearing house and money market for every Tom, Dick and Harry that comes along with a new pipe-dream, the smoke of which he wishes the Government to provide, as well as the fuel.

The Federal Farm Loan system is quite parallel to the Federal Reserve system, in that it has 12 Federal Land Banks, the local co-operative national farm loan associations acting in the same capacity as the National Bank members of the latter organization. As the farmer subscribes for capital stock in the association and in the bank to the extent of 5 per cent of the amount of his loan, like National Bank stockholders, he assumes a double liability of 10 per cent of the amount of his loan.

However, under the socialistic recommendations of the politically-appointed Farm Loan Board, Congress would amend the Farm Loan Act, making provision for the removal of this 10 per cent liability, permit the various land banks to take over that liability, and thus bind the United States Government to repay the outstanding bonds on farms upon which loans have been made through the system. This would give the borrowing farmers a nice, wide-open loophole through which to escape the repayment of their loans. Let us grant that no considerable number of the farmers would wish to so shirk their financial obligations; with the enormous volume of loans outstanding that are now on the books, added to the great number of loans being granted and paid over every day, it is easy to appreciate that it would not be necessary for any great number of farmers to so become poor pay in order to convert our Treasury Department into a bankruptcy clearing house expending hundreds of millions in making good the farmer's poor debts.

Thus, adopting a policy far more advanced than anything radical Russia has as yet dreamed of, the United States would become unique because of the fact that it would be the only land in the world where the Government provided a banking system for a special class, and the Government, not that class, would stand to lose all and any losses!

When the Federal Farm Loan system was put upon the books in 1916, it was the intent to provide the farmer with long-term credit, a temporary board of directors being appointed to officer each of the 12

land banks; when farmers had repaid the original capital advanced to capitalize these banks, they were to be turned over to the farmer-stockholders, they to assume all responsibility and operate the banks themselves. This is the only sane and sensible method of running banks anywhere, and because a small minority wishes the Government to become banker for a special class, is no valid excuse for the institution of such a super-socialistic program.

The farmer-borrowers will very soon repay to the Government the last dollar of capital advanced to start this system going, and then we face the question of whether the farmer shall himself become responsible for this banking system that a kind and considerate nation provided for him, or whether he shall be the only baby in the banking business, and the Federal Government become banker in order to carry on his business.

Sound, sane, sensible and conservative men are of the opinion that he should take his medicine, assume all the losses that may accrue, and not pass the buck to Uncle Sam's money box. In other words, that the 12 Federal Land Banks be immediately turned over to the farmer-owners, they to elect six directors of each of these 12 banks, the Federal Government to appoint three to safeguard any interest that the Government may have. This latter plan seems essential, in view of the fact that all Farm Loan Bonds are tax-exempt in lieu of being issued under Government supervision.

The sound-minded farmer element is against the creation of the proposed socialistic program, and I believe all business men will be upon understanding of the fact that a radical minority is trying to put something across. The National Grange, the National Board of Farm Organizations are already on record as opposed to this program, while James R. Howard, president of the American Farm Bureau Federation, although looking kindly upon many over-liberal plans, has recently said that: "I deplore a growing tendency on the part, not only of some farmers, but other men in high places, to stress the functioning of government too much and of the individual too little."

As Congress is soon to decide this matter, I would urgently suggest that every man reading this immediately write his Congressman and two United States Senators at Washington, telling them that he favors putting the 12 Federal Land Banks wholly into the farmer's control, and leaving the Government out of wholesale banking business. Let the farmer stand up to the rack and run his own business, and—pay his own bills.

JOINT STOCK COMPANIES VS. CO-OPERATION

The farmers grain companies are still in a stage of evolution. It is quite probable that the final form has not been even suggested, or at least advocated by propagandists. This was shown to some extent at the meeting last month of the Farmers Grain Dealers Association of Missouri.

Missouri farmers' elevators' reports now show that the elevator stock is gradually being assembled in the hands of a few of the wealthiest farmers with a result that after the share-ownership is limited the tendency is then to make a large dividend rather than to give service to the community. There is in various parts of Missouri a

feeling that the joint stock farmers elevator is not a true farmers marketing organization, therefore, is coming the request of a similar plan to change the joint stock to a co-operative form. As the law in Missouri now stands it is necessary to dissolve the organization through the circuit court in order to change to the co-operative form unless 100 per cent consent of the stock holders, which is practically impossible, is obtained to change to the co-operative form. The grain states, Iowa, and Illinois have an amendment to the co-operative law stating that by two-thirds share holders votes in a farmers elevator, this change can be made. The Farmers Grain Dealers Association went on record requesting the next legislature to investigate this matter and make such changes as seemed advisable.

THE SITUATION OF THE FARMER

BY E. D. CHASELL

Secretary Farm Mortgage Bankers Association of America

Agricultural prosperity is decidedly on the upward swing.

The close of 1922 will see the farming industry back to normal and by the end of 1923 the losses of 1920 and 1921 will have been entirely repaired.

This prediction is general and applies to farmers as a class. There will be individual exceptions. The man who lost his head in the land boom of 1919 and bought a farm for \$400 an acre, making a cash payment of \$100 an acre, found himself bankrupt when subsequent payments came due and the value of his farm had dropped to \$250 an acre. That was not farming. That was reckless speculation.

There are 6,448,366 farms in the United States, and only a few hundred were purchased by men with small capital at extraordinary high prices, which wiped out the investment of the buyer when land prices relapsed to normal values, based on rental earnings.

Following the abnormally high prices and big profits that reached their peak in 1919, agriculture was the first business in 1920 to drop to rock bottom. The jar was so sudden that the importance of the disaster was greatly exaggerated.

Agricultural credit has been injured by magnifying the losses. The worst enemies of the farmer are those who have enlarged the importance of his losses. One governor of a great agricultural state won applause from his audience of farmers when he declared that 90 per cent of the farmers are bankrupt. A speaker at a Chicago convention recently said that over 50 per cent of the farmers are bankrupt. Such assertions may be politically popular now, but not next year when the situation is better understood. Careful investigation will show that less than 1 per cent are bankrupt.

In the year 1921 in the United States of 1,927,304 commercial firms doing business 19,652 failed. This is a fraction over 1 per cent.

In the United States, according to the census of 1920, of the total of 6,448,366 farms, 2,454,746 were operated by tenants.

In years past it has been so unusual for failures to occur among farmers that when one now goes into bankruptcy it occasions comment.

It is a safe estimate that the percentage of farm failures has been less than half as great as the failures in other lines of business. The greater solvency prevailing in agriculture is due principally to two causes—the low percentage of indebtedness on which interest is paid and the capacity of the farmer to reduce his cash overhead expense.

More than half of the farmer's labor expense is the work of himself and family. He has no monthly bill to pay for rent of a dwelling. That is thrown in with the farm. His food is largely provided from the farm. On two-thirds of the farms of the country, fuel may also be provided from the farm in the form of wood. This winter,

*Extracts from an article, one in a series, on "What is the real situation of the American Farmer," in the Chicago Journal of Commerce.

thousands of farmers have stopped burning coal and have gone back to wood. For two or three years the farmer is in position to refuse to buy clothing, farm implements and harnesses. He is in a very favorable position to "dig in" and lead a life independent of other occupations. The farmer's wealth is tangible and permanent. Very little of it is made up of good-will, an important asset in the business of the merchant and the manufacturer. After the "digging in" time is over and business again is on a normal footing, the farmer takes his place with the other business men of the country. The value of his land and other property will be undiminished from the effects of having lain dormant a few months. When agriculture shuts off buying, other industries atrophy and, unlike agriculture, they are not able to begin just where they left off when business again starts.

When forced into an economic contest, the farmer is in better position than anyone else to take care of himself and to play a waiting game. His average indebtedness is moderate—less than that in any other business. The total value of farm lands and buildings in the United States in 1920, according to the Federal census, was \$66,334,309,556. The total farm mortgage indebtedness in the United States is estimated by experts to be approximately \$8,000,000,000—something over 12 per cent of the total valuation. And this does not take into consideration the personal farm property, which is far in excess of the personal debts. The census reports farm mortgage indebtedness of \$4,003,767,892 January 1, 1920, but that only includes indebtedness on farms occupied by owners at the time the census enumerators called. No information is collected regarding farms operated by tenants or managers. The census gives the mortgage debt of 18.6 per cent of American farms. It is conservatively estimated that 40 per cent of the farms are encumbered by mortgage.

The railroads of the country are understood to be carrying an indebtedness of approximately half their value. Mercantile and industrial concerns and public utilities often pay interest on more than half of their operating capital. It is apparent that agriculture is carrying a much smaller burden of indebtedness than any other business. The farmer can stand hard times, with less insolvency, than others.

During the last 50 years the drift of population from the country to the town has been more rapid than in previous years. As the proportion of country population has been reduced, the living conditions and profits of the farmer have steadily improved. Within recent years a group of faddists have urged a "back to the farm" movement as the one thing most desirable to promote national prosperity and happiness. Comparison of compensation shows that we have too large a proportion of our population on the farms now. To increase the percentage of farm population would throw the national system still further out of balance. The man who has the industry and managing ability to operate a farm is entitled to labor compensation not less than that received by the bricklayer, the plumber or the railroad employee.

Improvements in farm machinery have increased the productive ability of farm workers. This is particularly noticeable in grain harvesting machinery, with which two men can now accomplish as much as a dozen could with the hand implements of 75 years ago. It is no longer necessary for a majority of the population to engage in rural pursuits to produce the food required for the nation.

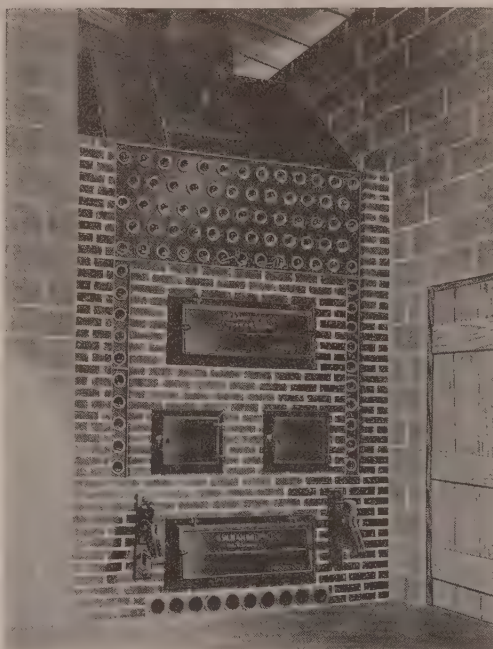
The friend of the farmer will not favor Government appropriation to put more competitors into his field of operations. If 15 per cent of those now engaged in farming were to change to other gainful occupations, and part of the fields now cultivated were turned into pastures, it would be better for those remaining in the business.

All signs point to a speedy rehabilitation of agriculture on a nationally profitable basis with one exception. The exception is taxation. Agricultural taxes are steadily and rapidly advancing. The farmer pays heavier local property taxes than form-

erly; and also Federal income taxes. Unless there is a cessation of the steady increase in the output of tax-exempt securities the taxes of agriculture as well as other industries will continue to increase.

NEW EQUIPMENT AT FOSTORIA

The Fostoria Storage & Transfer Elevator Company of Fostoria, Ohio, has recently made some improvements in its plant. The elevator is one of



RANDOLPH DRIER IN FOSTORIA PLANT

the most up-to-date transfer houses in Ohio, and is so arranged that it is very flexible and can be operated with much less labor than most houses of its capacity.

The iron clad working house was acquired some

plan and is 130 feet high. This contains 22 bins with a capacity of 75,000 bushels. The machinery equipment consists of a No. 9 Eureka Clipper and a double warehouse Eureka Cleaner. Two 96,000-pound Fairbanks Beam Registering Scales are on the second floor, while the top floor contains the four elevator heads and drives. The conveying and elevating machinery was furnished by the Webster Manufacturing Company.

The house has a 1,000-bushel per hour bleacher and there has just been added a Randolph Direct Heat Drier of a capacity of from 500 to 600 bushels per hour, which takes the place the old drier which necessitated a boiler to operate it.

The concrete storage annex consists of eight tanks 25 feet in diameter and 78 feet high which, with three interstice bins, gives a storage capacity of 250,000, making a total storage for the plant of 325,000 bushels. The original house was erected by the Burrell Engineering & Construction Company.

Adjoining the elevator is a one-story warehouse, 42x48 feet, used for storage and as a sacking room. There is a seven-foot basement under the entire plant. In the basement is a car puller operated by a 25-horsepower motor. The total power required for the house is 215 horsepower which is distributed through 12 motors of various sizes, each drive in the house being operated independently.

The company is ably managed by the president, A. T. Ward, who has had an extensive experience in elevator operation.

"BLACKHULL" WHEAT

Kansas has a new variety of Hard Winter wheat of which great things are expected. It has been grown chiefly in Harvey, Sedgwick and Reno Counties and it is under test at the Kansas Agricultural College, which, however, makes no report on varieties until they have been tested on for three years at least. But the county agent of Harvey County furnishes some facts about it. Blackhull wheat, he says, is highly disease resistant, has a stiff straw and stands up well in rich ground where other varieties go down. Its yields are high. It



PLANT OF THE FOSTORIA (OHIO) STORAGE & TRANSFER ELEVATOR COMPANY

five years ago by Buffalo interests, but the company does a general transfer business, for its location at the intersection of five grain roads, gives it advantages which many independent shippers appreciate. The working house is 42 by 48 feet on the ground

is not very winter-hardy and is not recommended for western Kansas.

Blackhull was developed from three black heads of wheat which Earl G. Clark, a farmer near Sedgwick, found in a field of Turkey Red in 1912.



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CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., MARCH 15, 1922

POOR OLD FARM BUREAU

IT IS bad enough to be spurned, but to be spurned twice in the same spot is too much. Our hearts should bleed for the Farm Bureau Federation for this has been its recent experience. Perhaps we would grieve if the Farm Bureau had not brought its castigation upon itself.

The first blow came from the cooperative live stock shipping associations which the National Live Stock Producers Association, the pet child of the American Farm Bureau Federation, is trying to put out of business at various central stock markets. The independent co-operative societies are up in arms and have determined to fight the National.

The second jolt came from the Farmers Grain Dealers Association of North Dakota, which at its recent meeting at Grand Forks, repudiated the U. S. Grain Growers and all its works. The sentiment of the convention was pretty well expressed by Secretary Lee whose report appears on another page of this issue. North Dakota has been the stamping ground of radical social experimenters. The leader of the group, Prof. E. F. Ladd, now Senator, was one of the Committee of Seventeen of the Farm Bureau who formulated the policies of the Grain Growers. The organizers counted on North Dakota to a man and had them already numbered among their members. But the plans of the Grain Growers, or rather the utter lack of plans, has disgusted even the radicals of the Northwest, and the U. S. G. G. will have to get along without them.

All this must be somewhat discouraging to the Farm Bureau. That organization tried

to monopolize the marketing of both livestock and grain, and the American farmer has rebelled. He has renounced the monopolies threatened by the agencies of the Bureau. This was the undoubted goal of the Farm Bureau or it would not have been so anxious to have the Co-operative Marketing Bill passed by Congress. This independent stand of the farmer organizations is one of the most encouraging things we have seen in some time, and promises a future where honest competition will keep grain and stock marketing on a basis of economy and service.

CHANGES IN WHEAT GRADE

ON ANOTHER page will be found suggestions for changes in wheat grades which have been made to Secretary of Agriculture Wallace. He requests that suggestions or criticism of these grades be sent to him not later than March 23. There will be no public hearings so all your comment will have to be done by mail.

To nine out of ten wheat buyers the changes would make but little difference. Millers, who buy the bulk of Spring wheat, buy it on quality and not on name. The changes, therefore, merely express the desire of the growers to kid themselves in the belief that they can get something for nothing, and changes would only make for harder work and confusion of inspectors.

The very fact that there are to be no hearings leads us to believe that Secretary Wallace does not contemplate changing the grades unless there is an unmistakable demand from all interests. If you have anything to say see that it reaches Washington before March 23.

UNIFORM INTERPRETATION OF GRADES

WHAT is heat damaged wheat? This was the question which consumed most of the time at the meeting on March 1 at Oklahoma City. The gathering was composed of grain dealers from the Southwest, members of state and board of trade inspection bureaus, and Government officials, about 150 in all.

The meeting was called because of dissatisfaction from the various interpretations of damaged wheat at the several inspection offices. The differences in the grades assigned have amounted to from 10 to 30 cents a bushel in price. The inspectors present at the meeting are trying to work out a form which will make uniformity less difficult, which country dealers can follow without danger of being severely penalized when their grain gets to a terminal market or inspection point, but just what that form will be has not been announced.

This is one of the phases of inspection upon which there can never be perfect uniformity. Of necessity a decision must rest upon individual judgment and until all men are cast from a single mold there will be differences in judgment even when the men concerned are trained observers and scrupulously honest in their mental processes. By reviewing many samples together, however,

inspectors and shippers can approach uniformity in grading damaged wheat and this is the most we can expect. Even if this much is accomplished the meeting will prove itself a decided success.

FARM NEWS

MUCH of the news and several articles in this issue relate to farm subjects rather than to strictly elevator or grain matters. This is not by design, but happens because the grain dealers' interests at this time are so closely bound up with legislation and financial issues as they relate to farming and farm movements that the subject assumes unusual importance. A close reading of these articles will not be unremunerative for they show up many of the fallacies in regard to farm subjects under which our legislators and the general public are laboring. As grain dealers are often called upon to answer arguments about alleged abuses and fancied unfairness to the farmers, this number will prove of value.

I. C. C. SUPREME IN RAIL MATTERS

DECIDING the now famous Wisconsin Rate Case, the U. S. Supreme Court held that the Interstate Commerce Commission has power to fix intrastate rates if the state rate made unjust discrimination against any stated area. This settles the contention of many years between state commissions and the Federal body, and the decision will be welcomed by the grain trade as it will insure market equalization from competing territory so far as state discrimination is concerned.

The decision does not affect the power of the state to fix rates within its borders, this power remains as it has always been; but it settles for once and all the fact that when there is conflict, the Interstate Commerce Commission is the higher authority and its rulings shall prevail. It will mitigate somewhat the ever-present threat of local political bias under which the railroads have been laboring, and makes our roads national utilities as they should be.

ANTI-TRUST LAW UNCONSTITUTIONAL

THE New York Supreme Court has held the Donnelly Anti-trust Law of that state to be unconstitutional. Amendments to the Law exempted combinations of farmers and dairymen, which, the court held, renders the whole statute unconstitutional and void. The technical ground for the decision was that the law denies to other business men the rights and privileges accorded to farmers and dairymen, and thereby it denies to all citizens the equal protection of the laws.

If this is good law in New York it should also be good law before the U. S. Supreme Court. Congress recently passed an act which gave to co-operative societies of farmers exemptions and privileges which trade associations and individuals are denied. This is certainly not equal protection before the law, and the Supreme Court, soon or late, will have to decide its constitutionality.

Charles Quinn recently called attention to the fact that Chief Justice Taft, when President, vetoed an appropriation bill because it contained this sentence: "No money therein to be appropriated shall be used for the prosecution of farmer or labor organizations for violation of the Sherman Anti-trust Law."

Congress in 1912, as in 1922, for the sake of the farm and labor vote, seemed willing to prostitute justice and destroy the foundation of equality upon which our Government was built. Fortunately there are still men who are Americans first and politicians or egotists second. Upon them the future rests with a grave responsibility and it is up to all of us to back them to the limit.

MORE POWER TO SECRETARY WALLACE

BILLS, authorizing the Secretary of Agriculture to determine trading rules and business practices of all who handle farm products, have been introduced into Congress by Senator McNary of Oregon and Representative Summers of Washington. This joint bill is known as the "Farm Products Trading Rules Act," and gives the Secretary power to investigate any transaction or record or business of persons who handle such products, and authorizes him to organize arbitration boards to settle disputes.

At its best the Act is an unwarranted infringement upon private rights; and at its worst it provides the Secretary with an instrument which could be used to destroy the last vestige of opposition to farmers co-operative marketing agencies, not through power of suppression perhaps, but by way of annoyances which would drive out of business all independent operators. We believe that even the present Congress would hesitate to pass such an injurious measure.

GRAIN RESERVES

RESERVES of grain in this country, estimated by the Department of Agriculture as of March 1, are much less than last year at this time, in spite of the heavy coarse grain production. There were left on farms 1,313,120,000 bushels of corn, or about 42.6 per cent of the crop, as against 1,564,832,000 bushels or 48.8 per cent of the crop last year. As the feeding requirements from March 1 to October 1 are normally nearly half the crop and as there has been and will be undoubted waste which always accompanies large and cheap crops, the carryover to the new crop will probably be very small, comparatively.

Wheat on farms March 1 was estimated at 131,136,000 bushels, as compared with 217,037,000 bushels last year. Elevator and mill stocks are 72,564,000 bushels or a total in all positions of about 224,000,000 bushels. This compares with 327,000,000 bushels last year, a decrease of 83,000,000 bushels. Our exports last year between March 1 and July 1 were about 105,000,000 bushels and if this amount is even approached this year it will put our millers in a hard scramble for supplies.

There were 404,461,000 bushels of oats, or

about 38.1 per cent left on March 1, as against 683,759,000 bushels or 45.7 per cent last year. Oats have been draggy all season and reports of decreased consumption have been prevalent in all centers, so that the disappearance, in the face of these facts, is somewhat remarkable. Barley shows 40,950,000 bushels in reserve this year as against 65,229,000 bushels last year.

ENCOURAGEMENT

TOO many grain dealers turned faint-hearted when a co-operative elevator has appeared at their stations. They have been able to see no silver lining to the cloud and life has become a place of gloom and discouragement. But on Page 646, L. W. Railsback offers some suggestions which should prove encouraging to these pessimists. Mr. Railsback is a director of the Illinois Grain Dealers Association, and has had experience in co-operative competition. He is no "Pollyanna," but a practical successful dealer who knows what he is talking about, so that his optimistic attitude can be accepted as an actual basis of operation and not as a mere theory.

The experience of many co-operative elevators this year shows that they are not immune to the vicissitudes which befall independent houses, and the failures among the latter are certainly no greater than among the co-ops. So why lie down on the job? Others have successfully withstood the invasion of their territory, and so can you. It all resolves itself in the matter of service, for a farmer may easily be carried away by a co-operative organizer and lend his support to a movement, but if the project does not produce better returns than the independent house has in the past, the farmer is not going to sacrifice his personal advantage for the sake of a theory.

All grain dealers are agreed that a privately owned and managed business can be operated more economically than a co-operative house with paid help to run it. It is up to the individual then, to demonstrate this fact in his community, not by losing his head and entering into a price boosting competition, but by good conservative management with fair and equitable treatment to all and a smile,—particularly the smile.

THE GENOA CONFERENCE

BADLY as we need a full economic understanding with Europe, under the circumstances no one can quarrel with President Harding's determination not to be represented at the conference at Genoa, Italy, scheduled for April 10. The refusal of this country to take part will have a more salutary effect than if we participated. We will lay ourselves open to criticism by the chauvinistic press abroad and will not make America any more popular with the masses, but the statesmen and perhaps even a few of the politicians will be brought to face the brass tacks of the real situation, a thing they have carefully avoided in the past.

American business men have come to dread every news item from Washington, lest our

politicians will be found to have again stirred up an evil scented mess that disturbs business or undermines the Constitution, but gets ignorant votes for the legislators. But bad as our Congressmen are, they are no worse than the politicians abroad. They, and they alone, have kept Europe in turmoil ever since the armistice, and we would gain nothing and might lose much if we took part in their squabbles. At this distance it looks as if the Genoa conference would result in a mere grinding of political axes, and we do not care to be the grindstone nor the boy who turns it.

FIAT MONEY

IN SPITE of the examples of fiat money and its effect which we have had from every country of central and eastern Europe, our politicians, and some public men outside of politics, still keep flirting with the idea in the interest of some special class or group. Of all the radical and silly measures which have been advocated in recent years, this is the most dangerous, for it is applied first to one group and then another, and all in their selfishness fall for it, regardless of the effect it would have upon the country at large.

The names of Thomas Edison and Henry Ford carry a great deal of weight with many people. They have earned their place in our regard, one as an inventor and the other as a manufacturer and merchandiser. But neither of them apparently knows the first thing about economics or they would not be advocating spurious currency based upon farm products or upon the good name and credit of our Government. The proposed Bonus Bill with its discountable certificates is another form of fiat money propaganda that is unworthy of Mr. Fordney and its other advocates. Even the radical farm bloc might be supposed to have intelligence enough to draw a lesson from the experience of Russia, Austria and Germany, but their taste of power seems to have destroyed their judgment. The article "Government for Farmers Only" by Earle W. Gage, in this issue, provides an instance in point.

The line is sharply drawn between money that is backed by a gold reserve, the world's standard of banking security, and that which exists merely as an I. O. U. and is issued with the hope that posterity will pay. The American people would be quick to repudiate fiat money if it were presented to them as such, the danger lies in the camouflage with which it is concealed. We have drawn upon the future to pay our war debts; it is time the nation took the stand for cash payments on its operating expense.

Auto trucks brought 51,100 hogs, 3,600 sheep, and 9,500 cattle to the Chicago market last year, from distances up to 50 miles. This hauling was done cheaper than the railroads could do it, and the animals reached market in an infinitely better condition than if they had been shipped by rail. There are many services that the truck can do that is out of the realm of horses. There should be no conflict between the two, each has a function to perform.

EDITORIAL MENTION

Alberta is proposing a law to compel Canadian farmers to co-operate in fighting grasshoppers and other insect enemies of crops; a sort of Farmers Draft Law.

Oat smut still causes hundreds of thousands of dollars loss each year to elevator operators as well as farmers, in spite of the simple formaldehyde preventive.

Senator Moses says that "the agricultural bloc consists of 19 lawyers, one editor, one oil driller and one pipe manufacturer." But they all know how to farm for votes.

The best way to prevent a coal strike is to persuade your customers to stock up now for at least 90 days. If all coal bins are full miners will hesitate about starting something they can't finish.

For the seven months ending January 31, our exports were less than twice as much as our imports. This is much better than it has been, but the ideal, healthy state is for one to balance the other.

President Harding has taken a firm stand on the soldiers' bonus question, and we believe he will be equally courageous in case the coal miners remain obdurate. We have little fear of a coal shortage.

The American Wheat Growers, Associated, proposes to reconcile all the plans and theories of the various farmers organizations and make one big pool. It will be so busy reconciling that there will be little time to market grain.

The Interstate Commerce Commission has modified its order in the western rate case, so that railroads may be allowed to retain the relationship between markets. This is the danger of flat reductions or increases in rates.

Western Canadian wheat is known generally on the world's markets at "Manitoba." Saskatchewan and other provinces take exception to the name as most of the wheat is no longer raised in Manitoba. They all want the credit for their own product.

President Markham of the Illinois Central is right when he says that when public supervision of railroads assumes the duties of management and inflicts unnecessary burdens upon the roads, it is the public that has to pay the bill.

Bert H. Lang of the Soil Products Department, First National Bank in St. Louis, proposes a new way of getting crop statistics, namely: "Provide that all threshing outfits operate under Federal License with provision for final report at a stated period at the end of the season, such reports to cover stocks of old wheat in their patron's hands as of July 1 and also the threshing result of the then current crop." This is all right as a supple-

mentary source of information, but inasmuch as there are thousands of farmers who do not attempt to thresh until long after the final returns on the crop are issued, there would be grave discrepancies.

Parts of North Dakota are suffering from feed shortage which has reached serious proportions. It must amuse the Russian sovietists that such a condition should exist in this country where there is such a wealth of feed grains and hay.

An elevator is proposed for the Everglades of Florida. The Everglades suggest to most of us merely moss-hung trees, snakes and alligators. But drainage has made some wonderful corn land in this forsaken region, and even an elevator is a possibility of the near future.

If there is one agricultural fact that has been thoroughly and conclusively demonstrated, it is that fertilizers return a profit out of proportion to their cost. Many elevators are using the figures that have been prepared in every agricultural state to work up a nice business in this profitable sideline.

Chairman Trethowan, chairman of the Australian Wheat Pool, is on his way to this country to negotiate an agreement with American and Canadian interests to restrict selling at certain periods so as to avoid competition. We wouldn't give a cancelled postage stamp for Mr. Trethowan's chances.

Plans for wheat pooling having fallen flat in Canada the farmers are now trying to force the Government to handle the crop. American farmers will be fortunate if they can gain the sad experience by proxy from our northern neighbors, instead of having to go through with the uneconomic experiment themselves.

The Indiana Grain Dealers Association has joined with the millers of the state in arranging for wholesale life insurance of members up to \$2,000 and up to \$1,000 for employees, at a rate about half that of individual policies. Secretary Riley has accomplished something worth while in this arrangement.

The Department of Agriculture has been devoting much time to the production of high-yielding varieties of both Spring and Winter oats. State experiment stations are co-operating. Iogren and Idamine are two varieties that have already been distributed in Iowa and Idaho, respectively, but the work is only just started.

House Resolution 2964: "To promote agriculture by stabilizing the prices of certain products," represents the attempts of the North Dakota crowd to revive the U. S. Grain Corporation and fix a minimum price for wheat. Only the extremists like Senator Ladd are for the bill, and recent price gains seem to have taken all the pep out of its support.

The engineers who are investigating the state owned elevator and mill in North Dakota, recommended that the state write off

its books the actual cost to the state and place the plant at present value, as a basis of calculation of profit. A great many private elevator owners would be in a much more healthy condition if they did the same thing. An elevator built at war costs cannot compete with one built now, unless this loss is accepted.

The farmer is receiving plentiful advice as to what crops to plant or not to plant this year. Most of them will seed in what they have been accustomed to grow, with a little more attention to rotation than they have paid in the last few years, perhaps, but otherwise with little or no attention paid to the advisors. In the long run the farmer is wise.

The season of conventions is upon us and the grain trade needs no reminder that there are a multitude of national issues which need the support or opposition of the united trade. You cannot give your share of such support by staying home from your association meeting. Sportsmanship, even if it were not a matter of personal advantage, commands your presence.

Those who have given thought to future shipments of grain from Great Lake ports direct to Europe, call attention to the necessity of having package freight wharves in connection with elevators as grain will have to go as ballast cargo only, in many instances. This is brought out in connection with conditions at Liverpool in the first page article of this issue.

The Agricultural College of Missouri is responsible for the statement that farmers' buying and selling associations in the state in 1921, saved \$91,773 over what it would have cost through ordinary channels. This appears like careless bookkeeping, as some of the transactions must certainly have had some odd cents involved in the deal. If they had said \$91,773.49 it would have been more convincing. As it is it leaves us cold.

Senator Arthur Capper of Kansas has been elected leader of the Agricultural Bloc in Congress. For many years he has cultivated the art of making the farmer believe he was abused so he could sympathize and suggest correction in his farm publications, and incidentally get the farmers' subscriptions. It worked splendidly. He is still at the same game and with the same methods, except that instead of dollars he is now after votes.

The new domestic bills of lading go into effect on March 15, 1922. The carriers will permit the use of old forms where new forms are not available, but shippers should stamp the old form as follows:

This shipment is tendered and received subject to the terms and conditions of the company's uniform bill of lading, effective March 15, 1922. This receipt is not negotiable and if the shipment is consigned "To Order" must be exchanged for the company's uniform order bill of lading.

.....
Shipper's signature.

.....
Agent's signature.



C. W. URMSION
Indianapolis

NEWS OF THE TERMINAL MARKETS



R. S. FITZGERALD
Cincinnati

ELECTION AT LITTLE ROCK

At the recent annual meeting of the Little Rock, Grain Exchange, Little Rock, Ark., Guy Williams was elected president and F. Kramer Darragh, vice-president. The directors chosen were: John F. Weinmann, Walter Brown, E. L. Farmer, Geo. E. Cunningham and C. L. Gordy.

NEW OFFICERS AT CAIRO

The new officers elected to serve the Cairo Board of Trade, Cairo, Ill., are, H. E. Halliday, president; Ira Hastings, vice-president; John Thistlewood, secretary; Louis H. Block, treasurer.

Directors are, H. V. Lind, Chas. Cunningham, O. B. Hastings, H. S. Antrim, E. G. Pink, John Thistlewood, Ira Hastings.

LOOK FOR CONTINUOUS GOOD MARKET

The decline we had during the past week or 10 days from the previous high point, of course, has shut off some business, but on the whole, the volume does not show a material decrease. Thus far Milwaukee buyers have absorbed everything offered and are looking forward to a good market right along.—E. P. Bacon Company, Milwaukee, Wis. March 11, 1922.

IN THE INTERESTS OF GRAIN SHIPPERS, ETC.

Officers of the Chicago Board of Trade desire to place grain shippers, producers and consumers in position where it will be possible for them to apply to the state legislature for any change at any time which they may deem advisable. At a recent meeting they therefore favored a broader and more elastic basis covering the clause relative to the Illinois Warehouse Act before the Illinois Constitutional Convention.

GENERAL DEMAND GOOD

The demand for cash grain in this market has been very good and has not been influenced by the option market as much as usual. Of course, the main reason for this fact is the extremely light receipts. Especially true is this of wheat, the movement of which is very limited and we look for the premium on good heavy milling wheat to increase.

The recovery of grain prices has, of course, had a very far reaching effect on the entire trade and since the first of the year we have had a better feeling of optimism than we have seen for some time. From what observations we can make, we find that improvement can be noted in practically every line and we find that every degree of improvement results in a very large increase in optimism.—Mutual Commission Company, Cincinnati, Ohio. Market letter of March 13.

JULY WHEAT LOOKS ATTRACTIVE

J. Rosenbaum Grain Company of Chicago, Ill., says in late market letter:

"Wheat has had a good decline and, although it may have extended further than generally expected, it is certain that the decline has placed the market in a decidedly better position to respond to constructive news. Considering the closely adjusted position of the world's supply and demand, there is every reason to expect developments favorable to investors. July wheat is selling at a good discount under May. While the crop outlook has improved, it is a long time to harvest. Constantly shrinking supplies and the possibility of a crop scare sooner or later make purchases of July wheat on breaks attractive.

"Corn at no time showed decided weakness and the market has all the appearance of having ab-

sorbed the heavy selling of the recent past. Much may be said in favor of higher prices. The export demand has been a vital factor in our market for a long time and there seems to be no letup in this demand."

W. S. POWELL DIES

After many months of stern but hopeless fighting against cancer of the throat, William Smith Powell, chief grain inspector and weighmaster of the Cairo (Ill.) Board of Trade, succumbed at his home in Cairo on March 5.

Mr. Powell was 56 years old at the time of his death. Brought up in Chicago, he got into the grain business at an early age and for 29 years was connected with the weighing and inspection departments of the Chicago Board of Trade. In 1909 he was appointed chief inspector at Cairo and held the position up to the time of his death. He had been for many years a faithful attendant at the principal grain conventions and had a wide acquaintance in



THE LATE W. S. POWELL

the trade. His friendliness and courtesy endeared him to all with whom he came in contact and he will be greatly missed by a large number of dealers.

Mr. Powell was an earnest churchman and for the last three years had been grand knight of the Cairo Council, Knights of Columbus. To Mrs. Powell and the other members of his family who survive we extend our deepest sympathy.

TO BOOM PHILADELPHIA SHIPPING

The following recent dispatch from the Quaker City will be of undoubted interest to all grain exporters:

"The Port of Philadelphia Ocean Traffic Bureau has been formed by the leading trade organizations of Philadelphia, which will be the means of quickly advancing the commercial prestige of this city, and Emil P. Albrecht, president of the Philadelphia Bourse, has been appointed president of the bureau. George F. Sproule, director of Wharves, Docks and Ferries of the city, is chairman of the sub-committee and he has forwarded copies of the report of his committee to all the trade bodies together with a copy of the minutes. As soon as the program is formally adopted steps will be taken to have the 'bureau' established on a working basis. Maritime men associated for years with the activities of the Port of Philadelphia have expressed themselves as well pleased with the progress made.

"President Albrecht explained in detail the procedure that is to be pursued by the bureau in going after new business for the port, and what this business will mean to the city at large with the bringing of additional ships here. It has been es-

timated that the average ocean carrier entering the port spends approximately \$20,000 while here. With 1,448 overseas vessels arriving here last year, and this number to be greatly augmented this year through the activity of the new ocean traffic bureau, it was pointed out that the investments that are to be made in financing the organization will offer big returns to the city and find reflection in increased business in all lines."

FAIR DEMAND FOR CORN AND OATS

Corn and oats business picked up considerably on the bulge of the market but dropped off some when prices started to decline. However, the receipts are slowing up and this week there has been a fair demand for all the corn and oats arriving.

The demand for mill feed is from a hand to mouth character. The trade is only buying as they need it feeling that prices will be lower later on.—H. S. Allen & Co., Pittsburgh, Pa. Market letter of March 13.

MORE THAN NORMAL MARKETING OF WHEAT

There has been some local movement of Winter wheat and as prices are rather attractive to the producers there has been more than normal marketing at this time.

The receipts of corn here have been fairly good with demand constant and no accumulations noticed. Receipts are not so heavy now as country points are reporting bad roads and consequently light receipts. Values here are just about in line with western terminal markets, but better than most of the eastern markets.

Oats are in slow demand and only an occasional car of oats suitable for seed brings anything like market values. Oats are slowly accumulating in the elevators here which is unusual at this time of the year. Prices are much lower than western terminal markets quotations. Trade not inclined to buy and demand continues much below normal.—Harper Grain Company, Pittsburgh, Pa. Market letter of March 13.

BUILDING FOR THE FUTURE

Norfolk has just authorized a bond issue of \$5,000,000 for the improvement of terminal facilities, pier, and grain elevator of 750,000 bushels' capacity. The plans call for the expenditure of \$3,500,000. The balance to be secured from the bonds may be put into additional grain storage if the business at the port warrants.

At the same time that the Norfolk program was being planned, the Hampton Roads Port Commission has been making a survey of that port and has made some 14 recommendations to the General Assembly of Virginia for the development of that port.

Eastern people have either not waked up to the fact that the St. Lawrence Deep Waterway project will be adopted and put through, or else they have no faith in the threatened setback for Atlantic ports which would follow the construction of the waterway. Probably the latter is the real situation. While there is no question but that great quantities of grain will be diverted to the northern route, still the St. Lawrence channel will take years to complete and by that time the country's exports will have grown faster than the new facilities so that both Virginian ports will get plenty of business.

New York, Philadelphia, Gulf Ports and others have shown great activity in port development. Part of this is due to the pressure of the northern route, but most of it is made necessary by the

natural growth of the foreign commerce of the country which the St. Lawrence waterway will not affect in the least. Western shippers are glad to see better facilities in the Atlantic Ports, for they have long been needed.

BIG BILL REILLY

Ssst! Grain Dealers! Listen! We've got something on Big Bill Reilly of the Cincinnati Grain & Hay Exchange of Cincinnati, Ohio, and don't want him to get wise that we're spilling it to you. Bill's a big fellow and might get sore. Here's a picture of him drawn from life while he was acting as judge of elections at the annual election on the Exchange held from 10 to 1:30 o'clock one day late in January. At first glance one would easily imagine that we were publishing a cartoon of Bill. That's where the joke is and the reason why we don't want Bill to know we're running it.

It's no cartoon at all but a life-like picture. Get us? Just as he looked when serving as judge of elections. No cartoon or anything. Naturally any one with a face like that wouldn't want to have it get in the papers. We ask you particularly to keep quiet about it as we wouldn't hurt Big Bill's feelings for anything.

Big Bill is with The McQuillan Company. We'll hold their paper out this month so he won't get wise to the running of the picture. Last year before he began to look this way he took a trip and a great many grain and hay dealers through Ohio and In-

The Smile that won't come off.



diana still remember and talk of the visit of a certain young man of gigantic proportions with a hearty handshake and million dollar smile who came from Cincinnati to tell about the superior service he was prepared to give through the firm with which he was associated, The McQuillan Company, Inc. And they do say he made good on the service.

Ssst! Grain Dealers! Listen! If you go to Cincinnati in the near future and call on The McQuillan Company, don't say anything about our running Big Bill's picture.

GENERAL CONDITIONS WILL GROW BETTER

Our movement of wheat, corn and oats, has been generally declining for the past three weeks. The latter part of February we had quite a heavy movement of corn, but since then the receipts have let up considerably. Wheat has been moving in fair supply, but the quality has been very low. We do not think over 10 per cent of the receipts would pass as choice milling wheat. Our information from all millers covering this whole southeastern territory is that their stocks are very light and the demand is also more normal, however, most of them are buying a little choice wheat and they report generally a gradual improvement in the milling business.

There has been a good demand for corn here right along, but the exporters are getting pretty well filled up again. Receipts are running light and it looks as though the demand will fully keep up with

the receipts, in fact we look for corn values to harden a little—they have already worked about 2 cents closer to the option than they were last week.

Receipts of oats have been running light and considerably less than expected, and while the demand has kept up, the oats that were selling at $4\frac{1}{2}$ cents to 5 cents under the Chicago May a week or 10 days ago, are now selling at about 3 cents under. Stocks of oats in the Southeast are light and it looks as though we are going to get a demand for them right along at fairly steady prices.

We note that business conditions all over the country are improving, although the improvement is hardly noticed, but an advance of 15 cents to 20 cents a bushel in this corn the past 60 days indicates that we are almost bound to have very beneficial effects on the general business of the country. The railroad people say they are noticing an increase in the freight, incident to the advance in the price of corn.

We do not look for anything startling, but we do think that the general condition of things will work up gradually for the better for the next six or seven months.—*Elmore-Schultz Grain Company, St. Louis, Mo. Market letter of March 13.*

"NO PEP!"

"Wheat lacks pep," says C. A. King & Co. of Toledo, in letter of March 11. "Our monthly disappearance on the crop has been around 80,000,000 bushels. It would appear we are short wheat, but where do the primary receipts come from? Has domestic consumption been greatly reduced? Are the Government figures wrong? Our idea of the situation is that unless the visible supply of wheat Monday shows a decrease of 2,000,000 bushels or better, buyers will do well to wait for breaks. The market is a case of present plenty against prospective scarcity.

"We feel friendly to corn and rye. The future of oats does not look bullish."

CORN RECEIPTS LIGHT; ADVANCE EXPECTED

Receipts of corn here the past week show a decided falling off. Values in this market have had a fairly good break, in sympathy with the decline in other markets the early part of the week. The demand here at present seems to be of a local character, industries taking the bulk of the arrivals. Very little business is being done for shipment. Selling on the part of the country since the break in prices has been limited, and no doubt receipts will continue light for some little time as farmers will no doubt begin their spring work soon, and we would not be surprised to see considerable of an advance in prices.

Receipts of oats have been fairly good, and while the demand has not been active, all arrivals have been taken care of at fairly good prices as compared with other markets. Stocks seem to be large everywhere and buying has not been active on this account.—*Mueller Grain Company, Peoria, Ill. Market Letter of March 13.*

THE GOOD DEMAND WILL CONTINUE

While the week just closed has seen wide fluctuations in the futures market there has been a strong undertone to the Buffalo cash market throughout the week, and at the close today spot corn prices are $1\frac{1}{2}$ cents higher than last Saturday while oats are only $\frac{1}{2}$ cent lower against a decline of $1\frac{1}{2}$ in Chicago May. This shows conclusively that the recent advance in values has been warranted, and due to an actual demand for the real article.

While supplies of corn and oats in store locally are large, the movement from the farms has ceased and will not be resumed until after planting, and in the meantime there is every indication that the good demand experienced here since the first of the year will continue right through the spring months and that local stocks will not be more than sufficient to carry the trade which looks to this market for supplies until the opening of lake navigation six weeks hence.

It will be another month or six weeks before pastures in the East will green up and in the

meantime consumption will continue at a heavy rate as feeding operations have proven profitable this winter and the consumer seems to have gotten his nerve back. In fact conditions in the grain trade throughout the East are nearly if not quite normal again.

The wheat market has been dull with very little trading and will probably continue so, as local millers have mostly enough wheat on hand to carry them until the opening of navigation. There are indications of some improvement locally in the demand for Winter wheat and it would not be surprising to see a scarcity in Soft wheat in this market shortly.—*J. G. McKillen, Inc., Buffalo, N. Y. Market Letter of March 13.*

D. J. SCHUH RETURNS TO GRAIN AND HAY EXCHANGE

Following an absence of 11 months, D. J. Schuh, resumed his duties on March 1, as executive secretary of the Cincinnati Grain and Hay Exchange. During 1921, Mr. Schuh was in the employ of the Early & Daniel Company and when John De Molet was elected president of the Exchange it was the first act after he assumed office to instruct the Board of Directors to endeavor to have Mr. Schuh return to his former position with the Exchange.

In taking over the executive secretaryship of the Exchange, Mr. Schuh relieves B. J. Drummond



EXECUTIVE SECRETARY D. J. SCHUH

of those duties which he had been combining with those of traffic manager. Mr. Drummond will continue to serve as traffic manager. Mr. Schuh left the Exchange on April 1, 1921, to accept an executive position with the Early & Daniel Company. He is a man of wide acquaintance with grain trade affairs and may be expected to promote the growth and influence of the Exchange on his return to his former office.

CHANGES IN MEMBERSHIP

Chicago.—New members elected to the Board of Trade during February are: James T. Munds, Edw. Tilden, Charles V. Essroger, Henry B. Smith, Paul Heyman, Alfred G. Kay, C. H. McCarty, C. G. Ellis, Benjamin F. Stern, S. F. Mayer, and Edward T. White. The memberships of the following were transferred: John H. Holden, James B. Forgan, Benjamin S. Armstrong, Joseph A. Rushton, Frank S. Gresham, H. W. Ladish, Harley McCardel, H. R. McLaughlin, H. P. Rogers, H. S. Newell and Julian G. Cates. Reported by Secretary John R. Mauff.

Duluth.—W. F. Rosar and Parker M. Paine have been admitted to membership on the Board of Trade; John A. Lamb and Joseph Simons have withdrawn their memberships on the Exchange. Reported by Secretary Charles F. MacDonald.

Indianapolis.—Charles S. Weirick, 515 Board of

Trade Building, is a new member on the Board of Trade. Reported by Secretary William H. Howard.

Kansas City.—A. W. Stewart was admitted to membership on the Board of Trade on transfer from G. C. Martin; R. O. McKenna was admitted on transfer from A. W. Stewart. Reported by Secretary E. D. Bigelow.

Milwaukee.—William P. Cavanagh, Frank A. Miller, Harold L. Mott, Fred Pabst, Charles H. ReQua are new members in the Chamber of Commerce. The memberships of C. S. Christensen, Sr., Frank W. Donaldson, A. C. Peters, Emil Stoppenbach and George A. Schroeder, deceased, have been transferred. Reported by Secretary H. A. Plumb.

Richmond, Va.—Membership on the Grain Exchange was granted to Herbert Smith during February. Reported by Secretary W. F. Green.

Wichita.—Herman E. Bauman of the Southern Grain Company and Clyde F. Candill, of Stevens-Scott Grain Company, were elected to membership on the Board of Trade. Reported by Secretary R. B. Waltermire.

TERMINAL NOTES

The Wilkinson Grain Company, Ltd., of Montreal, Que., has been incorporated.

A Chicago Board of Trade membership sold on March 9 at \$7,350 net to the buyer.

Logan & Bryan of Chicago have been admitted to membership on the Duluth Board of Trade.

Rasmussen & Co., grain and stock firm of Chicago and New York, recently made an assignment.

L. C. Newsome of the Newsome Grain & Feed Company, Pittsburgh, Pa., is taking a short vacation in Cuba.

Fred Langenburg of Langenburg Bros. Grain Company, St. Louis, Mo., is enjoying a vacation at Pass Christian, Miss.

C. F. Caudill of Stevens-Scott Grain Company, Wichita, Kan., was recently admitted to membership in the Wichita Board of Trade.

A receiver was recently appointed for the Templar Corn & Fruit Products Company of St. Louis, Mo. The assets were given at \$1,990,000.

E. M. Hibbs, formerly in charge of the mill feed department of the Kemper Grain Company of Kansas City, Mo., has joined B. C. Christopher & Co.

A new blackboard has been installed in the trading hall of the St. Louis Merchants Exchange and hereafter local stock market quotations will be posted.

F. J. Landon, recently Kansas City representative of the Opsal-Fleming Company of Minneapolis, Minn., has closed his office and will return to Minneapolis.

Frank Schroeder, formerly associated in the grain business with J. J. Mullaney at Sioux City, Iowa, is now buying grain for the Terminal Grain Corporation.

J. P. Parks, until lately connected with the Salina office of the Hall-Baker Grain Company of Kansas City, Mo., has resigned and returned to Kansas City.

H. D. Richardson, formerly with the Armour Grain Company and now residing in Colorado Springs, Colo., was a recent visitor among his old friends in Chicago.

The plant of the Curtiss Grain Corporation, which recently became financially involved, is to go back to the Nowak Milling Corporation which held a large mortgage against it.

The St. Louis Merchants Exchange is perfecting arrangements to send broadcast, by radio telephone service, grain quotations and other information to the territory covered by this market.

Herbert H. Ladish, formerly with the Ladish Milling Company of Milwaukee, Wis., has engaged in the grain and feedingstuff jobbing business with offices in the Brumder Building.

Clarence H. Thayer of C. H. Thayer Company, members of the Chicago Board of Trade, and Paul B. Malebranche, an employe of the firm, were indicted recently by the Grand Jury charging confidence game and obtaining money by false pretenses. The two men were charged with obtaining

\$60,000 from the Corn Exchange National Bank by forging receipts placed with the bank as collateral for loans. Mr. Thayer denied the charge and placed the blame on Malebranche who disappeared.

The Northwest Wheat Growers, Inc., an association of grain growers in Washington, Oregon, Idaho and Montana, have opened a sales office in Minneapolis, Minn., in charge of J. H. McVay.

Frank C. Blodgett, who has been associated with the grain interests of Minneapolis, Minn., for very many years, has formed a connection with the Barnes-Carey interests at Kansas City, Mo.

Stein, Alstrin & Co. of Chicago have admitted to partnership C. Grovenor, Ellis and C. H. McCarthy, S. F. Mayer and B. F. Stein who have been for some time associated with the firm.

Duhne & Co. of Milwaukee, Wis., have incorporated with capital stock of \$20,000 to conduct a general grain business. Capital stock is \$20,000 and incorporators are Francis Duhne, Jr., Erwin John, and Edna Nyff.

W. A. Hottensen of W. M. Bell Company, President H. H. Peterson and John L. Bowles represented the Milwaukee Chamber of Commerce at the National Rivers and Harbors Congress held March 1 and 2 at Washington, D. C.

W. W. Wright has taken charge of the Memphis office of the Marshall Grain Company of Oklahoma City, Okla., succeeding Chas. W. Friss, who returns to Oklahoma City to take charge of the hay department of the Marshall Grain Company.

The Minneapolis Durum Products Company of Minneapolis, Minn., has incorporated with a capital stock of \$500,000. Officers are B. B. Sheffield, president; W. H. Sudduth, vice-president; W. D. Gregory, secretary; W. J. Russell, treasurer.

E. O. Moffatt, who has been engaged in the grain business at Kansas City, Mo., for over 30 years, has sold his Board of Trade membership and organized a savings and loan business. The Moffatt Grain Company continues under the management of J. F. McElvain.

The Board of Directors of the Memphis Merchants Exchange, Memphis, Tenn., recently appointed Miles B. Houseal as chief grain and hay inspector of the Exchange to succeed E. R. Gardner who resigned. Effective March 1, the fee for plug inspection of hay was reduced from \$3 to \$2 per car.

The Kemper Grain Company of Kansas City, Mo., sustained a loss of approximately \$60,000 recently as a result of irregularities in the accounts of two employes. Following the knowledge of the loss, application for a Federal receivership was filed. The entire stock of the company is held by W. A. Hinchman, president, and Fred L. Bedell, secretary.

Late reports were that E. W. Wagner & Co., of Chicago, who went into liquidation December 30, would pay creditors 50 cents in cash and 50 cents more in slow assets. Plan of settlement

will be submitted to creditors in a short time. Liabilities of the company are \$8,500,000 of which \$6,500,000 are in the West and \$1,500,000 in the East. The Chicago committee having the liquidation in charge is composed of J. C. Murray, F. S. Cowgill, Fred S. Lewis, G. B. Van Ness, John H. Jones and John Hill, Jr., the latter acting as secretary. John S. Sheppard, receiver at New York City, said: "If this estate is administered in bankruptcy with its attendant reclamation claims and litigations, the administration will take many years and even then the net realization will be comparatively small. Consequently, I believe that a settlement should be speedily brought about and carried out." The Chicago reclamation committee concurred in this opinion.

The incorporation and merger was announced recently of two long established firms of Cincinnati, Ohio, the Brouse-Skidmore Grain Company and the Perin Milling Company. The new firm will be known as the Perin, Brouse-Skidmore Grain & Milling Company and will operate flour mills in addition to dealing in grain and hay. The capital stock is \$125,000.

Andrew R. Templeton, for many years a member of the Johnstone & Templeton Company of Milwaukee, Wis., has re-entered the grain business after several months' absence by accepting the position of manager of the Milwaukee office of Armour Grain Company of Chicago. The former manager, James Hessburg, became associated with the Froedtert Grain and Malting Company on March 1.

Geo. C. Martin, Jr., recently of Goffe & Carkener Company of Kansas City, Mo., and P. C. Knowlton have formed a partnership known as the Martin-Knowlton Grain Company to take over the business of Goffe & Carkener Company at St. Louis, Mo. Mr. Martin and Mr. Knowlton are well-known in southwestern grain circles and the new firm will have the wishes of countless friends in the grain trade for their success.

The Barnes-Piazzek Company of Kansas City, Mo., has been taken over by the Nye & Jenks Company of Omaha, Neb., and hereafter will be known by that name. D. F. Piazzek will retire from the grain business to take care of his farm near Stanley, Kan. He has been a member of the Kansas City Board of Trade for 22 years and during the war served as second vice-president and manager of the Kansas City office of the U. S. Grain Corporation.

The Overland Grain Company, owned principally by the southeastern millers, which has had its offices in Nashville, Tenn., for some years, has been incorporated under the laws of Missouri with \$50,000 capital stock and the main office has been removed to St. Louis. The office will be in charge of Paul W. Pritchard, formerly of the local office and a very popular man in the grain trade. J. B. McLemore will continue to direct the management of the company from Nashville.

TRADE NOTES

The Hart Grain Weigher Company of Peoria, Ill., has sold its farm grain elevator machinery business to the Kewaunee Implement Company of Kewaunee, Ill.

The directors of the Grain Dealers' National Mutual Fire Insurance Company of Indianapolis, Ind., met recently, electing the following officers to serve for the coming year: J. W. McCord, president; A. E. Reynolds, vice-president; J. W. Sale, treasurer; C. A. McCotter, secretary.

H. Z. Ballinger, lately of Ballinger & McAllister of Bloomington, Ill., builders of grain elevators, flour mills, etc., has joined the Burrell Engineering & Construction Company of Chicago, Ill., and will serve in the sales department. Mr. Ballinger started in the grain elevator building business with the

Burrell company in 1903, remaining with them until 1917. Now he has returned and will again engage in building grain elevators on the Burrell plan.

The Medart Patent Pulley Company of St. Louis, Mo., has changed its corporate name to the Medart Company. It was held that the earlier name had become a misnomer as it failed to embrace its extensive lines of pulleys, friction clutches, rope drives, sprockets, etc., that the firm manufactures today.

One of the handsomest wall calendars we have received this year comes from the Cyclone Blow Pipe Company of 2542-2552 West Twenty-first Street, Chicago, Ill. This well known firm has been for years specializing in installing dust collecting systems in large and small grain elevators and remodeling old

systems on modern lines on its most economical plans. Supplementary systems are added also where present systems are outgrown and defective systems are corrected and put in proper working order. The illustrative feature of the calendar is a Cyclone Blow Pipe Company system removing the world's dust. This it apparently does efficiently and economically.

The Weller Manufacturing Company, Chicago, Ill., manufacturers of conveying machinery of all kinds, has perfected a Portable Reciprocating Feeder to take care of materials received in hopper bottom cars. This feeder eliminates the digging of pits, and cars can be unloaded at a point most convenient to where the materials are required. This machine operates above the track and handles sand, stone, gravel, coal, ore, etc., saving the labor of several men. One man can easily handle the job of unloading and delivering the materials to any style of loader or elevator. It is mounted on roller bearings and can easily be slipped under the car. A motor or engine is mounted on platform making it a complete unit. There are no complicated parts to get out of order. Blue prints showing construction will be sent on application.

IMPORTANT C. I. F. RULING

Justice McCardie of London, in the case of the *Diamond Alkali Export Corporation vs. F. Bourgeois*, has made a ruling which permits buyers to repudiate customary c. i. f. contracts, under the pretext that a "received for shipment" bill of lading is merely a receipt for the goods, or that "insurance certificates" are not assignable. The serious aspects of the case were presented in *Commodity Reports* of February 20, in part as follows:

Judgment was rendered in favor of defendants and consisted of three points. The first point (purely incidental) turned upon late delivery, and was decided in favor of the plaintiffs; the defendant's contention being that by the *stipula* clause in the contract. The other two points dealt with the status of bills of lading denoting the receipt in good condition, of goods for shipment, as distinct from bills of lading denoting "received on board," and with the use of *floating* bills of insurance under floating insurance policies as documents tendered in compliance with the requirements of c. i. f. contracts. The effects of the adverse decision of Justice McCardie upon established practice in foreign trade are far-reaching. As a precedent it opens up the prospect of contract repudiation by buyers, not only in British dependencies, but everywhere else in the world, and herein lies its chief menace to American commerce.

The ruling of Justice McCardie is neither bad law nor in itself unfair. The learned judge merely declared the status of "received for shipment" bills of lading and of insurance certificates in the light of what is known as the *Bills of Lading Act* (1906) and of the *Marine Insurance Act* (1906) and declared that they do not adequately meet the needs of the situation. Yet he duly considered the established custom in international trade and pointed the way to a remedy by intimating that the difficulties created in the judgment could be easily, promptly, and effectively met by the adoption of appropriate modifications of contracts.

It is an established business custom in international trade for a buyer in an over-sea country to demand a c. i. f. contract for shipment to be made within a certain time. He must have an approximate basis for fixing the time when the goods reach him. Very often in the ordinary course of business, he has sold the goods to his own customer, agreeing to an approximate time of delivery. Or the goods may be wanted at destination for some special purpose and the different interests of their arrival may lead to serious complications and loss.

On the other hand it is perfectly proper for the seller to require the time when the goods are expected to be ready for shipment and to make proper provision as to the loading of vessels upon which shipment may be made within the time agreed on between the seller and buyer. The seller ordinarily protects himself to the full limit of reasonable prudence against strikes, embargoes and Government interference. He undertakes full responsibility for the goods over which he exercises control. If he is a shipper, he makes due provision for raw materials for labor and for a working schedule enabling him to have the goods put on a freight train or any other form of conveyance to the port of shipment. He also books space on an ocean vessel to carry the goods to destination.

Delays Caused by Changed Sailing Schedules

When it comes to ocean vessels the seller faces a problem in the fact that sailing schedules frequently depend upon factors beyond his control. There may be a steamer leaving the port of shipment for the

port of destination at regular intervals. The seller delivers the goods to the dock in time for the scheduled shipment, but the company operating the vessel may either omit or postpone the sailing, or it may direct the vessel to proceed first to a series of other ports of call rather than direct to the port of destination, delaying the arrival of goods at destination.

Now in this connection let us examine the general tenor of c. i. f. contract clauses with regard to the obligation assumed by the seller to effect ocean shipment at a given time or within a given time. If in engaging space for the shipment the seller has not entered into a contract with the ocean carrier which would indemnify him against loss or responsibility under his contract for the failure of the vessel to sail on scheduled time, or for the substitution of a vessel, or for the deviation of the vessel in its journey from the direct course, he has assumed responsibility and obligations of a serious character for factors which he cannot control. In other words, he has either speculated or committed himself without realizing the seriousness of the obligations he has assumed, when he has in his c. i. f. contract the clause "shipment within 30 days," or "shipment in the latter part of the month of —."

Sellers should rigorously avoid entering into any such obligations without a provision exonerating them from responsibility if, after delivery to the ocean carrier, the shipment does not go forward as planned. There is no argument that would stand the test of business reason which would justify the assumption of such a responsibility by the seller. He has no right to take this risk upon himself. On the other hand, the seller whose c. i. f. contract lacks such a protective clause exposes himself to serious perils if he delivers goods to the ocean carrier in a happy-go-lucky fashion, trusting that shipment will be effected in due course as scheduled.

Buyer Should Allow Time for Delayed Sailings

There are several possibilities to be considered in this connection. Once in a while the buyer must make such rapid connections that the rigid observance of the promised time of shipment is of exceedingly great importance to him. He may have agreed to furnish the goods by a certain time in order to comply with time requirements under a Government or other contract bearing penalty clauses for delay. In this case, in all fairness, he must assume the risks incident to delay. A merchant undertaking to procure goods abroad and to deliver them within a specified period of time must first consider how long it should take him to perform his contract, and he must not overlook the element of uncertainty in ocean shipment. He should not figure so closely that shipment on February 28 would be considered as complying with the clause in the contract calling for February shipment, while shipment on March 1 would appear as a violation of the same contract. Trading between distant countries is based by usage and comity upon substantial rather than technical compliance with obligations unless in altogether exceptional circumstances. The importance of rigid adherence to the time requirement of contract clauses should be pointed out by the buyer in these exceptional circumstances. A certain latitude is therefore provided in the ordinary run of contracts by the use of expressions as "end of the month," or "early part of the month," or "shipment in May, June, July." The seller should not be reasonably expected to shoulder the responsibility for the ocean carrier's schedule. It is his business to place the goods in the physical possession of the carrier in sufficient time to enable the latter to effect the shipment of goods in compliance with the intention of the contract.

Sometimes the buyer undertakes to sell goods bought abroad as merchandise afloat. The time element of delivery here is more or less a speculation in goods. Natural produce is frequently sold in this fashion. The same remarks apply in this case as in the preceding paragraph. But in the majority of cases it does not really make much difference to the buyer if, on a c. i. f. contract specifying shipment by the end of August, the goods are actually loaded on September 4. Taking the case of such shipment to the Dutch East Indies, for instance, where the weather element alone may cause a difference of several days one way or another, so slight a divergence from the contract clause can not be of grave consequence to the buyer.

If under such circumstances the buyer seeks to repudiate the contract it is generally due to the fact that it is convenient for him to do so. The price of the commodity may have dropped, or he may seek to extort an unwarranted concession. If he needs the goods badly, or if in the meanwhile the world market price has risen, he will not seek to take advantage of the failure by the seller to adhere strictly to the wording of the contract by a few days' delay.

Now most of these c. i. f. shipments are made against payment by letter of credit, and the bank holding the funds is instructed to pay them against "documents." The documents include as the most important elements a bill of lading, as evidence of shipment, and an insurance policy as evidence of having protected the goods against loss or damage.

Issuance of Bills of Lading

Due to the uncertainty of sailing dates and to other exigencies of maritime traffic, there has developed a practice of issuing bills of lading reading "received for shipment." This is a bill of lading indicating

that the seller has complied with his part of the obligation and delivered the goods to the ocean carrier in good condition, but that the goods have not been actually put on board for one of several reasons. The vessel may not yet be in port, or the goods must await their turn in loading. Perhaps they are lighter packages which must be kept on the dock pending the stowing of heavier packages before they can be taken on board. The bill of lading may specify the steamer, reading as follows: "Received for shipment by SS. ——— or any subsequent steamer." The bill of lading in the case decided by Justice McCardie read: "Received in apparent good order and condition from ——— to be transported by SS. *Anglia* now lying in the Port of Philadelphia and bound for Gothenburg, Sweden, with liberty to call at any ports in or out of the customary route, or failing shipment by said steamer, in and upon a following steamer, 280 bags of dense soda." The document did not even say "immediately following" nor indicate that the following steamer would be under the control of the carrier issuing the bill of lading. The justice found this bill of lading to be a mere receipt for the goods. The remedy, the justice ruled, lies in appropriate contract clauses accepting the "received for shipment" bill of lading. But the "received for shipment" bill of lading represents a thoroughly established usage in several trades.

In the *Marlborough Hill* case, tried in Privy Council, a broader view was taken by Lord Phillimore. With this view Justice McCardie disagreed, fearing that if the view of Lord Phillimore was carried out logically a mere dock receipt might be considered a bill of lading. This is avoided in the Liverpool cotton trade by the guaranty of shipments within 21 days. In the Australian wool trade it has been suggested that the bank accept the documents subject to a guaranty by the shipping companies that the vessel was in port, that the goods were under the control of the shipping companies, and that the ship-owners would guarantee shipment by the particular vessel named in the document. "Shipped" bills of lading, or bills of lading reading "received on board," are impossible in many instances, and a rigid construction of Justice McCardie's decision is bound to work havoc with financing arrangements.

Distinction Between Insurance Policy and Certificate

Of equal importance to this decision by Justice McCardie was the view taken by this British jurist that a proper policy of insurance was not presented in the insurance certificate which accompanied the documents. The insurance certificate in question read as follows: "This is to certify that on ——— this company insured under policy No. 2319, for ———, \$5,790, on 280 bags, 58 per cent dense soda ash, N. Y. & L. test, valued at sum insured, shipped on board of SS. *Anglia* and other steamer or steamers at and from Philadelphia to Gothenburg. And it is hereby understood and agreed that in case of loss such loss is payable to the order of the assured on surrender of this certificate."

This certificate conveyed all the rights of the original policy holder and was declared to be subject to the full terms of the policy. Justice McCardie dissented from the ruling of Justice Dailhache in a previous case, in which the American certificates of insurance were admitted to be on a footing of their own, being accepted in England as policies. Justice Scrutton had also previously stated that a certificate of insurance issued by an insurance company under a floating policy, upon which document the company can be sued, would suffice in any case. Justice McCardie felt that the buyer in this case was at a disadvantage by not being able to examine the policy under which the certificate was issued. He further pointed out that the buyer could not assign the certificate for the purpose of bringing suit in the same sense that he could assign a policy, and he ruled that a document of insurance is not a good tender in England under an ordinary c. i. f. contract unless it be an actual policy and unless it fall within the provisions of the *Marine Insurance Act* (1906) as to assignment.

Justice McCardie distinctly realized the serious effect of his decision. He expressed his opinion "with diffidence and reluctance" and intimated that legislation might well be needed to enlarge the operations of the *Bills of Lading Act* (1855) and of the *Marine Insurance Act* (1906). He advised the employment of appropriate clauses in the contract itself to meet the difficulties indicated in the judgment.

Effects of Justice McCardie's Decision

It is understood that the sellers in this case have decided not to appeal, and so for the present Justice McCardie's decision is the law in England with regard to bills of lading and to insurance certificates. This state of affairs has led to much discussion and numerous conferences in the United States between important shippers and their advisers on legal aspects of transportation and insurance. The prevalent view is that for the present original policies of insurance must be presented under c. i. f. contracts to England. But the grave danger is always present that in other countries, first of all, of course, in British possessions, buyers under c. i. f. contracts may choose for ulterior motives to repudiate c. i. f. contracts under either pretext ("received for shipment" bill of lading or "insurance certificates"), claiming that these do not constitute proper documents called for under c. i. f. contracts and setting up the defense that the sellers had not complied with their part of the con-

tract. The position of the banks disbursing funds under letters of credits is a very delicate one, and not only shippers, carriers, and insurance companies, but also banks are vitally interested in submitting the decision of Justice McCardie to review. In the face of abandonment of the appeal by the sellers in the "Diamond Alkali" case, a movement is on foot to bring about a friendly suit to settle the question. Justice McCardie in his decision pointed the way to such a suit by saying that if any custom and usage could be asserted, modifying the long and clearly established rights of a buyer under a c. i. f. contract, such points could be dealt with in some future action in the Commercial Court. The interest aroused in the disquieting situation created by this ruling is evidenced in the number of communications received by the Department of Commerce from shippers, law firms, and insurance experts, soliciting its interest in finding a suitable remedy.

In the meanwhile trade bodies representing American shippers in several foreign countries have passed resolutions providing for the insertion in c. i. f. contracts of a clause agreeing to the acceptance of insurance certificates as equivalent to an insurance policy.

CORN PRODUCTS IN EUROPE

An extended study of the market possibilities for American corn products in Europe is being made by Trade Commissioner J. A. Le Clerc, who reports that most of the European countries have formed an unfavorable opinion of these products, as the kind used during the war was generally of the nature of unde germinated cornmeal, which, although of excellent food value if consumed while fresh, usually cannot be kept very long without spoiling. The degerminated grits or meal will keep practically as well as wheat flour. Persistent educational propaganda, supplemented by demonstrations, to introduce the higher grades of corn products and remove the prejudice encountered in Europe against this valuable foodstuff would no doubt pay in the end.

Some cities in Europe, and even some countries have regulations restricting certain uses of corn products, but wherever their use is permitted both the bakers and brewers using corn flour and corn grits are evidently competing successfully.

In France large amounts of corn flour were imported for use in bread making during the war and up to quite recently, but after the removal of all restrictions on the baking industry (August, 1921) no flour substitutes were used. Corn flour is used in some of the breweries, just as corn grits or corn flakes are used, generally in connection with American malt of high diastatic power. Under normal conditions the price paid in France for corn flour, much of which is purchased in Belgium, is such that it is quite possible for American firms to compete.

American maize groats cannot compete successfully with the excellent product of this kind manufactured in France from imported corn, as the whole grain is subject to a duty of only 6 francs per 100 kilos (220 pounds) and the manufactured product to 32 francs per 100 kilos. France imports a small amount of corn flakes from Belgium, and although it would be possible for American manufacturers to compete in this trade, the amount consumed is too small to be worth while. Flakes and groats are both used by the brewers, as they have approximately equal value as malt substitutes, but imported flakes can not compete in price with the groats manufactured locally from the imported grain.

An official of the Bureau de Ravitaillement estimates that on account of the world scarcity of oats the French Army will require 100,000 tons of coarse cracked corn, free from meal, or small-kernel corn (such as the La Plata corn) for horse feed. If American corn were imported for this purpose the Government would probably be interested also in the purchase of mills suitable to crack the corn.

Most of the corn used in France comes from Argentina, that country supplying 22 times as much of the French corn imports in 1912 as did the United States, 35 times as much in 1913, and 10 times as much in 1919. Argentine corn is preferred because it is smaller and therefore better adapted for a poultry feed than the American product, which must be cracked, thus entailing a certain amount of waste. It is also claimed that Argentine

corn is sweeter and is thus preferred as a feed for horses, besides containing 3 to 4 per cent less moisture than American corn, which enables it to stand transportation better and to keep in good condition longer. At present Argentine corn sells for 3 or 4 shillings more per quarter of 480 pounds than American corn, so price has nothing to do with the preference for the South American product.

It is not possible to sell corn grits in France for use as a substitute for rice, mainly because of the difference in price due to the tariff. Rice from the French colonies is admitted free of duty, whereas corn grits from foreign territory pays 32 francs per 100 kilos.

Belgium also purchases the greater part of its corn supply from Argentina. Unofficial figures of the corn entering Belgium via Antwerp show that seven times as much Argentine as American corn was imported in the January-November period of 1921. The Belgian preference for the South American product is based on the same reasons as previously given for France. American corn is considerably cheaper, but the people seem to want a small-kernel, flinty grain. One objection named against the use of cracked corn, namely, its lack of keeping qualities as compared to the whole kernel, is worthy of consideration. To prevent the spoilage of cracked corn, its moisture content should be kept below 12 per cent, when it will keep for a very long time.

Before the war Belgian bakers used a certain amount of corn flour in their baking. During the

breweries as adjuncts to malt. At present prices corn grits can easily compete with broken rice; furthermore, the rice used for brewing purposes is subject to a tariff and corn grits are free. Until recently some of the large brewers used as much as 30 per cent of grits, but now they can use only 10 per cent, owing to a recent regulation requiring that beer be made from a wort of 10° Balling instead of 13° as formerly. Although there is a reduction of only about one-fourth in the extract content of the wort, it means a curtailment of about two-thirds in the amount of malt substitutes that can be successfully used. Corn grits containing more than 1.25 per cent of oil are not satisfactory for brewing.

Trade Commissioner Le Clerc has also visited Poland, Germany, and the Netherlands and is continuing his investigations into most of the European countries. He expects to return to the United States about March 15.

A NEW IDEA IN SELLING GRAIN

BY L. C. BREED

Every suggestion that tends to promote trade is welcomed by retailers in every line. It has remained for a Massachusetts grain dealer, Herbert J. Jones, of Waltham, to demonstrate how modern salesmanship, that is on the alert for new ideas, can make practical use of the motor car in transporting a complete display of grain to the individual buyer's farm yard and there to demonstrate the



THE TRAVELING FEED STORE OF HERBERT J. JONES

war, however, the amount of substitutes used was excessive, and upon the removal of restrictions on the baking industry the use of all flours except wheat was abandoned for the time being. Certain bakers are now showing an interest in the use of a product such as corn flour, which has the same food value as wheat flour but costs only two-thirds as much. The use of 7 to 10 per cent of corn flour in mixtures can be made successfully and an appreciable saving effected.

Corn grits are used in brewing in Belgium, where there are some 30 large and about 1,000 small breweries. The large breweries are well equipped and use considerable amounts of corn grits, up to 30 per cent, in making beer. To supply this demand there are two large corn-grits factories in Belgium. The small brewers cannot use corn grits because of lack of equipment, but they can use refined grits or starch, as is done by almost every small Danish brewer.

Denmark imported more American corn than La Plata corn in 1921. Figures obtained from Consul General Letcher, at Copenhagen, give the imports from January to October, 1921, as 228,000 tons from the United States and 52,000 tons from Argentina. In 1920 the relative position of the two countries was reversed, the former supplying only 7,100 tons and the latter 252,000 tons. As the American product is cheaper, Denmark saved more than \$500,000 by purchasing the bulk of its supply from the United States. Danish farmers use small mills to grind the large kernel dent corn. Cracked corn is not imported because of its tendency to "heat."

Corn grits and refined grits are used by Danish

comparative values of various feeds for livestock.

A special truck body is used which at either side has been glassed in and divided into compartments in which 18 varieties of grain are displayed. In special pens at the front of the body of the truck, are carried a dozen blooded White Leghorn laying hens. Sleeping quarters for two men are provided in the rear part of the body, as well as cooking utensils, and a complete camping outfit. This will enable the truck to be operated all over New England, since it is proposed to use the machine with its display as described, in making visits to numerous agricultural fairs and expositions during the fall season.

SCALE REQUIREMENTS

We reprint below the general rules for scale design, as promulgated in Docket 9,009, Interstate Commerce Commission. This concludes our reprint of these rules.

SECTION IV—SCALE DESIGN, GENERAL

1. Scale mechanism, platform and framing, shall be of such design as will insure proper distribution of the weight among the parts when the load is applied, and shall be of such rigidity as will prevent displacement of the bearings on knife-edges, due to deflection of any member, or to oscillation of platform or hopper.

3. The vital parts shall be readily accessible for cleaning, inspection and adjustment.

4. Scales shall be of such construction that they will repeat their weight indications within one-half of the prescribed tolerance or ratio.

"JIM DUNN"

BY HOOZUS

Jim Dunn, who runs the elevator at Sperry Sid-ing says: "Ebe Shade was a'tellin' me th' other day that his feed grinder was about played out, an' he was a'wonderin' if he should git another one. He was a'sayin' t' me, he says: 'I been a'tryin' t' figger whether this here feed grindin' pays for itself or not.'

"Well, I says t' him, I says: 'Ebe! I'm not much on this here 'fishency bizness, an' I don't reckon I could put it down in figgers for ya, but here's th' sitchyashun: If I cut out this here grindin', that there Lem Sours—four mile east—would pull it all over his way, an' if I had t' set here an' see my good customers pullin' right past my door, an' a'takin' their stuff over t' that low down crook, I'm afraid it'd be apt t' spoil my disposishun.'

"Ebe, he kinda studied for a while, an' then he snickered a little, an' pretty soon he says t' me, he says: 'Jim, maybe ya can't handle figgers like some peeple, but ya got a facklity o' makin' a feller see just what ya mean, ennyhow, I'm goin' home an' order a new grinder.'

LITTLE TIPS FROM JIM DUNN

Don't never pay th' same for poor grain that ya do for good. Ya can't make a friend out o' one customer by makin' a fool out o' another.

Allus keep your office a'lookin' smart. Cleanliness is next t' godliness, an' your elevator is usually next t' your office.

Make all th' money ya can, but make it straight. Ya'll die some day, an' maybe th' spirits can hear us talk.

Allus look after your gas engine in zero weather. If ya don't open your pet-cocks for prevenshun, ya'll have t' open your purse strings for a new engine.

Don't wait for a fire t' put ya on your metal. Put th' metal on your building, an' let th' fire wait on ya.

When ya're dealin' in futures, allus remember that commisshuns is th' cheapest thing "on th' board." Git in an' out often—an' ya'll allus be able t'.

Allus try t' make friends with "stiff comp'ti-shun." It's better t' thaw out a compet'er, than t' try t' freeze him out.

When some dealers run out o' talk about their own bizness, they start in on th' other feller's. It takes both kinds t' make a world; but git a listner's certificate—there's more coupons attached t' it.

Some elevator men think they're doin' big bizness when grain is scattered all over th' floor, but th' rats an' income tax people know better. Keep it swept up an' fool 'em both.

SECRETARY WALLACE OFFERS PROPOSED CHANGES IN WHEAT GRADES

In the spring of 1921, I received a number of requests for changes in the Federal wheat grades, and in April held a two days' hearing, attended by various people interested in such grades. The evidence submitted did not convince me that the changes proposed were justified. At the conclusion of the hearing I made the following statement:

"The criticism of the present grades warrants a thorough-going investigation, especially as to their practical application at country buying points. I shall make such investigation during the coming wheat marketing season, and if changes are justified they will be made well in advance of the marketing season next year."

Last summer I secured the services of L. A. Fitz, of the University of Kansas, and John Lee Coulter of the West Virginia Experiment Station, and asked them to go into the wheat country and make thorough inquiry in the country and at the elevators and mills. I asked Mr. Fitz to serve because of his practical and technical knowledge of the grading and milling of wheat, and Professor Coulter because of his practical experience and his training as an economist. Both are men of very high standing in agricultural work, and undertook the inves-

tigation wholly free from predjudice and with no other desire than to gather and present the information necessary to arrive at a just decision. They had a free hand in making their studies and investigations through the summer and fall of 1921. They were furnished with experienced assistants and all of the data previously collected in this Department were made available to them. They spent some months in the wheat country. They have made several reports to me and some recommendations which, if adopted, would involve changes in the present wheat grades. These recommendations which contemplate changes are believed to be correctly summarized and stated here. Their reports are extensive and therefore the detailed explanatory matter and the discussions are omitted. In brief, their suggestions are as follows:

Test Weight Per Bushel

Let the test weight per bushel be determined upon the basis of the clean wheat, excluding both foreign material other than dockage and dockage. Four views as to grade requirements based on test weight per bushel are presented for consideration:

a. Let the present minimum test weight of 58 pounds for Hard Red Spring stand for No. 1, but change No. 2 to 56 pounds, No. 3 to 54 pounds, and No. 4 to 52 pounds, leaving No. 5 the same as at present.

b. Restore the former test weight per bushel requirement of 59 pounds for No. 1, leaving the other grades the same as at present.

c. Provide a new grade at the top with a minimum of 60 pounds.

d. No change in present test weights.

Moisture Content

Let the limit of 14 per cent for No. 1 Hard Red Spring and Durum wheat stand, but make the same limit apply to all the other grades in these classes. In case any wheat has moisture content in excess of 14 per cent, grade it in the same manner as if it did not have such excess moisture, but attach to the grade designation the words "excess moisture" or some similar phrase, together with the percentage of moisture. Apply the same principle to all other classes of wheat, using the present limit for No. 1 in each class as the basis.

Foreign Material Other Than Dockage

Let the grades be based strictly upon the clean wheat and, therefore, let all foreign material, including dockage, be treated separately. This would mean, for example, that the test weight per bushel would be on the basis of the clean wheat, excluding all foreign material. Limit No. 1 and all other grades to 0.5 per cent of foreign material other than dockage and when the amount of such foreign material other than dockage exceeds 0.5 per cent in any grade, its percentage shall be determined and stated separately in addition to the grade designation, together with a statement of the character of such foreign material, such as wild peas, kinghead, rye, flax, etc.

Subclasses of Hard Red Spring Wheat

Three suggestions are considered and presented:

a. Drop the Red Spring subclass.

b. Retain Red Spring and raise the requirements of Northern Spring wheat with respect to dark, hard and vitreous kernels, but no specific percentage recommended.

c. Let the present subclassification stand.

Mixed Wheat

Consideration is given to the question of the desirability of some change in the provisions for mixed wheat, with special reference to mixtures of Hard Red Spring and Durum wheat, but without specific recommendation.

While these investigations were being conducted and reports prepared by Messrs. Fitz and Coulter, independent consideration has been given in the Pacific Northwest to the possibility of some change in the standards for white wheats now covered in the common white and white club classes.

Among the suggestions advanced are the following:

a. Combine the present classes, common white and white club, into one class designated "white wheat."

b. Subdivide the new class into three subclasses, designated hard white, soft white, and white Walla.

c. Make the same application of the hard white and soft white subclasses as at present and designate as white Walla all white wheats or mixtures of white wheats containing more than 10 per cent of white club or Sonora.

As 90 days' notice of proposed changes is required, and as it is desirable to have any proposed changes go into effect at the beginning of the marketing of the bulk of the wheat crop of 1922, final decision as to changes must be reached early in April. I am sending this statement to every grain inspection department, and to organizations of millers, grain dealers, farmers and others having a direct concern with the marketing of wheat, including state authorities having the inspection of wheat under their jurisdiction. I shall not hold further

hearings, but invite any who may receive this statement to give careful consideration to the proposals included herewith, and to let me have in writing, not later than March 23, a statement of their views, with the reason for or against each item, avoiding generalities. Statements and opinions received later than March 23 cannot be considered.

This matter is one of considerable importance, and I hope to have free expression of opinions from those interested. All communications will be given full consideration. The announcement of conclusions will be made at the earliest possible date.

(Signed) HENRY C. WALLACE,
Secretary of Agriculture

DUST COLLECTING

The use of dust collectors and dust collector systems has become a necessity in many forms of industry besides milling and grain handling. It is necessary not only to obviate the danger of explosion in some cases, but as a sanitary measure as well as the recovery of valuable by-products in other cases. The use of dust collectors in some form is practically necessary in every industry that involves the dry grinding of materials. Chemical industries employ such devices and on the occasion of a recent meeting, M. I. Dorfan of the Allis-Chalmers Company prepared a paper which we find reproduced in a recent issue of the *New York Journal of Commerce*.

After a preliminary statement of the subject, Mr. Dorfan proceeds to say that the simplest form of dust collector is the settling chamber, and the principle on which it operates is merely a reduction in velocity, of the dust carrying air and dependence on this reduced velocity to precipitate the dust. A settling chamber has a certain efficiency in that the reduction of velocity will precipitate some of the coarser dust, but the fine dust continues on through the outlet.

The next step in the development of the dust collecting art was the development of the cyclone or centrifugal separator. Its principles of operation are as follows: 1. Centrifugal motion is induced by the shape of the exterior shell and construction of the interior of the device, and because of the difference in specific gravity of the air and the dust, the heavier dust particles, due to centrifugal force, are thrown to the sides of the device and in that way precipitated. 2. The reduced velocity in the interior of this device, due to its having a larger cross sectional area than the inlet pipe, gives the same results derived from the settling chamber.

Of cyclone devices there are two general types, that is, the suction and the pressure type. A further development was the use of liquid sprays in connection with either ordinary settling chambers or cyclone or combination of both.

All of the aforementioned devices are applicable to easily precipitated dusts, and by this is meant particularly dusts of comparatively coarse character. For the control of the finer dusts there was developed finally the filter type of dust collector. In its original stages it was nothing more than a series of screens or bags which were used for separating dust from the dust laden air. These filters were often employed in connection with settling chambers, cyclones and many other innumerable combinations as a final collecting medium.

The electrical precipitator, one of the important steps in dust collection art, is also one which must be mentioned.

In the opinion of Mr. Dorfan the most important step in the development of dust collecting machinery was the invention of the all automatic self-cleaning filter type dust collector. In this machine all the advantages of the foregoing devices exist, and furthermore, there are many advantages which this type of machine has over any of the others.

It must be admitted that for handling any dust collecting problem the determination of the proper dust collector is an important item, the most important requisite is a sufficient and well grounded knowledge of the type of hooding, sizes and areas of pipes and the air velocities employed.

WARFARE AGAINST INSECT PESTS

In addressing the first annual meeting of the Crop Protection Institute held at Rochester, N. Y., on January 12, Dr. R. W. Thatcher, Director of the New York Agricultural Experiment Station, said, humanity is in as much danger from food-attacking insects as it is from body-attacking bacteria. The warfare against insect enemies of plants, animals and men must be fought by every means of destruction which science and ingenuity can devise. The study of the effect of chemical substances upon the nutrition of man and animals has developed dietetics into a science of immense importance, and similar study of their effect in curing or alleviating disease, known as pharmacology, has been of untold benefit to the health of mankind. "It requires no great stretch of the imagination," said Dr. Thatcher, "to conceive that similar systematic study of the relation of chemicals to the life processes of insects might easily develop into a science which would have a great corps of workers, a wide field of activities and immense economic results in promoting the warfare against parasitic insects."

Researches thus far carried on in this field have dealt chiefly with the application of some of the common simple chemicals in the form of sprays, dusts or suffocating gases or liquids to insects which they destroy either by poisoning or by contact injury. "There has, however," said Dr. Thatcher, "been comparatively little systematic study of the relation of the chemical composition of groups of substances to their insecticidal and fungicidal properties; and almost no study of the chemistry of insect nutrition and physiology from the viewpoint of the possibility of establishing environment unfavorable to their growth."

HALF-HOUR RADIO SERVICE

Far-flung radio waves are carrying official grain price quotations to thousands of farmers in the Central West.

Service established by the Chicago Board of Trade recently is proving successful. Price quotations are being sent by radio telephone at half hour intervals from the opening of the daily market to the closing gong. Space between the market and the producers, dealers and handlers of grain is thus being eliminated. News while it is news is available to farmers in many isolated districts. Agricultural leaders deem it a great forward stride in the dissemination of market information.

The quotations are distributed from the floor of the Board of Trade through the KYW radio station of the Westinghouse Electric & Manufacturing Company by arrangement with the Commonwealth Edison Company. Wave length 360 carries the market news throughout an area having a radius of 500 miles and taking in the principal grain producing states.

Hundreds of radio receiving sets in business houses, city dwellings and farmers' homes pick up the quotations at which grain is then selling in the world market.

Price quotations on future contracts for wheat, corn and oats are transmitted on the radio telephone at the 9:30 opening each business day and every 30 minutes thereafter until the close at 1:20 p. m. Cash grain prices are quoted at 10:30, 12 noon and at 1:20, and "to arrive" prices at 1:20. During the morning and early afternoon market statistics and other official information is disseminated. The service has created widest interest and high commendation.

President Robert McDougal of the Chicago Board of Trade, in outlining this broadcasting of market information, declared it "the greatest forward step in 2,000 years."

It is reasonable to suppose, he said, that the half hour bulletins giving not only quotations but fundamental news of the crop and market situation throughout the world, will enable the grain grower to buy or sell as confidently and almost as quickly as if he were in Chicago. The country grain elevators will serve as excellent stations.

Other leaders in the grain trade pointed out that

at times a day may mean much to the farmer in marketing his grain, and that constant information will be of great value. The price of grain is not determined by factors in any one country, but by conditions of the world. The radio report, marketing authorities declare, will equalize the news opportunities between the farmer and city man. Instructions to farmers and others receiving the quotations are brief: "Tune your set to 360 meters."

INDIANA COMPANY HAS FINE EQUIPMENT

The Union City Elevator Company of Union City, Ind., was organized in September of 1919 for the purpose of buying out and operating the plant of the Farmers Grain & Milling Company of that city. The officers of the new company are C. N. Chattin, president; Clyde Shultz, vice-president; D. A. Lindley, secretary-treasurer. The company had a capital stock of \$25,000 and the property of the Farmers company was taken over. The plant was not operated, however, until October 6 of that year, when Henry W. Bowen, formerly junior partner of Geo. T. Bowen & Son, Savona, Ohio, was taken into the company and was made manager.

The mill was dismantled and the machinery sold, the space being used for feed storage. At the same time the elevator was completely remodeled and new equipment installed, the plant be-



PLANT OF THE UNION CITY (IND.) ELEVATOR COMPANY

ing completed about January 1 of this year. The house is on the Big Four Railroad and is of wood construction with a capacity of 50,000 bushels, of which 5,000 bushels are for ear corn, and the rest for small grain. The elevator is like new and the equipment is modern throughout.

The receiving capacity of the house is 10,000 bushels per day of 10 hours, while the shipping capacity is 5,000 bushels. A Monitor Combination Cleaner can handle 1,000 bushels per hour, so that all the grain can be cleaned as received if necessary. Other equipment in the elevator includes one 1,400-bushel Western Corn Sheller; one Bauer Bros. Attrition Mill; two Howe Wagon Scales and one Howe Automatic Scale; one electric freight elevator; seed cleaners; meal bolters, etc. Power is derived from a small steam engine and electric motors, the transmission being by rope and belt drives.

The company handles all grains, and in addition is equipped to carry a complete line of Clover and cane seed; feed; coal; salt; flour, etc. It has ample storage facilities and has already taken an important position in the community, with every prospect of a continued increase in activity and prosperity.

DISCOUNTS UNDER FEDERAL GRADES

About 150 southwestern grain dealers, members of state and Federal inspection bureaus, and Government officials met in Oklahoma City recently to discuss plans by means of which a uniform interpretation might be placed on the Federal grain standards at the various terminal and smaller markets. The meeting was the outgrowth of dissatisfaction result-

ing from the wide variation in prices due to the different rulings allowed for damaged wheat. The difference, it was brought out at the meeting, was often 10 to 30 cents a bushel and has been the cause of great confusion particularly on the part of country grain dealers who do not know what allowance to make for a possible grading of damaged wheat.

Other features of grain grading came up for consideration, but most of the discussion was in regard to damaged grain of which there has been more than usual this season. The purpose of the meeting was not to ask for a change in the Federal standards but to secure uniform applications. Officials of the principal inspection bureaus remained in session and worked out a plan which is expected to bring some relief.

PICKELL WINS DEBATE

"Speculation is an aid and not a menace in the marketing of grain." Such was the decision that went clattering over the telegraph wires from Lexington, Neb., at midnight, March 4, after one of the most comprehensive and dramatic marketing debates ever staged.

J. Ralph Pickell, Chicago economist, financial writer and publisher, won the decision over George J. Jewett, Portland, Ore., president of the Northwest Wheat Growers Association. Mr. Pickell took the negative side of the question of whether speculation is a menace to grain marketing.

Mr. Jewett represented the faction of farmers and farm organizers who have contended that the future market was not an aid to the farmer. The challenge for the debate created a stir. Farmers everywhere were eager to have the two recognized authorities, representing opposing sides, meet before judges capable of rendering a decision based on facts. Lexington, being about midway between Chicago and Spokane, was chosen for the debate, and incidentally was put on the map.

Twenty-four hours before the time fixed, caravans of dust-covered flivvers came winding their way over the prairies; farmers walked in or came on horseback or freight trains. Passenger trains brought others from Kansas, Missouri, Illinois, Wisconsin, Iowa, Minnesota, the Dakotas and several Western States. Overnight Lexington took on the appearance of a western boom town of the dim past. Two hours before the debate the Methodist Church, the largest local hall, was packed with 1,200 eager men and a scattering of women. Outside other hundreds waited to learn the result.

The judges were out 40 minutes. When they announced that Mr. Pickell had won, there was an outburst of applause. Mr. Pickell had gone into a solid farm community—a community steeped in prejudices against organized exchanges. He not only had proved that speculation was an aid to grain marketing, but in correcting the fallacies had won the hearty endorsement of the dirt farmers. The judges were Charles J. Brand, Pittsburgh, Pa.; Judge I. J. Nisley, Dawson County, Neb., and William Harvey, Kansas City. Harvey turned in a minority report, which, however, had no bearing on the result under the rules of the debate.

Mr. Jewett based his argument on the usual contentions of grain exchange opponents. He endeavored to show that prices could be depressed to the disadvantage of the farmer, and that speculation constituted gambling. His arguments, the judges decided, were disproved by the facts set forth by Mr. Pickell.

Mr. Pickell sprung a surprise by basing his debate wholly on the decision of the United States Supreme Court in the *Chicago Board of Trade versus Christie* case. He quoted the court's decision that the value of speculation "is well known as a means of avoiding or mitigating catastrophes, equalizing prices and providing for periods of want."

"People will endeavor," Mr. Pickell read from the decision, "to forecast the future and to make agreements according to their prophecy. Speculation of this kind by competent men is the self-adjustment of society to the probable."

He declared elimination of speculation in wheat, corn and oats when price deflation swept the world

in the summer of 1920 "would have constituted a catastrophe." Such catastrophe, he said, overtook many commodities not subject to speculation on the organized exchanges, including hides, leather, tobacco, silk and wool, the latter having no market "for three months at any price." The grain future market, registering world supply and demand and permitting speculation which the speaker declared is nothing more than price insurance, prevented wheat from following the downward plunge of wool and other products.

He pointed out that wheat is in demand by millers, exporters and speculators and declared that some millers were opposed to speculation "because the speculator is the competitor of the miller."

"If it were true that speculative selling always depressed prices, can you imagine that the millers would object to it on that account?" he asked, adding that the miller as well as the exporter always sought wheat at the lowest possible price. From the standpoint of private gain, he said, the larger exporters would be glad to see the doors of the speculative exchanges "barred and bolted" and that there would be "plenty of millers to furnish hammers and spikes."

Under present conditions, he continued, the exporter obtains the hedging or insurance protection of the speculative market and thus avoids speculation and operates at a profit of 1 per cent of the value of property handled, as shown by Department of Agriculture reports. The miller likewise hedges his trades to obtain the protection against price fluctuations, he said.

Assuming that the American farmer raised 900,000,000 bushels of wheat this crop year and today held it all on the farm, he would still be unable to fix the price, the speaker said, for this is not the only wheat producing country. To hold the grain would be gravest speculation, he continued. "You can never eliminate speculation, because it begins when the seed is submitted to the soil." After the miller and exporter have obtained their supplies, there are still millions of bushels of surplus wheat which must be carried and which, the speaker declared, is carried by the speculator. This point he proved to the satisfaction of the audience.

"The speculator buys because he believes in higher prices. It is important to note here that investigations reveal that 90 per cent of the speculative traders operate on the bull side of the market. They believe in higher prices for wheat. The other 10 per cent are usually found in the ranks of the merchandisers of grain."

He explained that in carrying the surplus there was necessarily a considerable shifting or canceling of contracts by means of set-offs. In such set-offs, he said, the idea of "gambling" originates, since there is no delivery of grain comparable with the volumes involved in cancellations. He quoted the Supreme Court, however, to show that the set-off is in legal effect a delivery.

"And yet with that decision staring them in the face, we find honest men everywhere who mislead the public by insisting that purchase and sale of bona fide contracts on the exchange is 'gambling in grain.'" He said success of large operators who had tried manipulation could be counted on the fingers of one hand, and declared speculators cannot, except under unusual conditions, unduly depress prices. "For the minute wheat prices fall below a parity of world price," he said, "then the exporters quickly seize that wheat—if the millers will let them have it."

He pointed to the fact that America is not the only wheat producing country and that prices must always be fixed by world supply and demand. It is not now and never will be possible for the farmer in this country to eliminate the law of supply and demand through pooling or any other methods obtain prices out of line with world supply and demand. Without the exchanges and the future market, Mr. Pickell showed, the farmer would receive less for his grain and the consumer would pay more for his bread.

SNOW and rain in the Southwest will cause some revision of the estimates of abandoned acreage. Crops as backward as the present one have been

known to produce well under exceptionally favorable conditions. The chances, however, look like a poor gamble.

KANSAS CORN

The Kansas State Agricultural College has been conducting tests of corn varieties at the several experiment stations and on farms which are described in Kansas Bulletin 227. Kansas has been roughly divided into nine sections according to rainfall, soil, and length of growing season. For instance in certain parts of eastern Kansas the precipitation is 40 inches while in the west it is 20 inches. Obviously the same variety of corn would not thrive equally well in both sections. Western Kansas is from 1500 to 2500 feet higher than the eastern part of the state. This too makes a great difference to corn. Some sections of the state have 100 days or less of growing weather, while others have 130 days. There is even greater variation in soil.

As a general rule, small varieties of corn yield better than large varieties on poor soil, in deficient moisture and in short growing seasons. The conclusions of the tests are as follows:

The varieties most extensively grown in northeastern Kansas are Reid Yellow Dent and Boone County White. These varieties, however, do not yield as well as some others which were grown in the experimental tests. Here Pride of Saline and Shawnee White produced the highest yields. Pride of Saline and Iowa Silvermine are especially adapted to the poorer soils in this section. On the more fertile soils Shawnee White is probably the best variety except in the northern part where it may not mature satisfactorily in short seasons. Boone County White does well on the better soils in this section. Kansas Sunflower almost always yields well in northeastern Kansas, but it has never been a popular variety. Commercial White, in general, matures too late for this section, but gives good results on bottom land along the Kansas River.

In experiment tests in southeastern Kansas, including the area south of the Kansas River and counties east of Cowley and Butler, Commercial White and adapted strains of Boone County White have given the best yields on bottom lands. Midland Yellow Dent and Kansas Sunflower are two outstanding varieties of yellow corn for this area. Hildreth Yellow Dent gives good results on very fertile land in favorable seasons only. For average conditions Midland Yellow Dent is the best variety of the three.

Pride of Saline and Commercial White gave the best yields on upland as shown by experimental tests. Kansas Sunflower is well adapted to the northern portion of this area while Midland Yellow Dent is the best yellow variety for the southern part. Shawnee White does well on good soil in the northern half of this area. On very thin soils, especially those subject to drouth, small, early varieties like Freed White Dent give the best yields.

In east central Kansas medium-sized varieties which mature in 110 to 120 days give the best results on the average. Pride of Saline has been an outstanding variety in this part of the state. It has yielded consistently high every season. Iowa Silvermine also does well. Kansas Sunflower is probably the best yellow variety for this area and is quite extensively grown. Reid Yellow Dent does well in favorable seasons in the northern part, but the average yield is not so great as that of the more hardy, better acclimated varieties. Commercial White and Boone County White yield relatively well on the better soils in the southern two-thirds of this area. Freed White Dent, the smallest and earliest variety in the tests, made the highest average yield during the four years that it was grown, because of its ability to produce relatively well in dry seasons. In a longer period it probably would not make so favorable a showing.

In experimental tests in west central Kansas, the earlier varieties yielded best. Early strains of Iowa Silvermine and Freed White Dent, both of which mature in 105 to 110 days, made the highest yields. The larger later varieties were usually injured by drouth during the latter part of the season and therefore did not yield so well as those which matured early. On creek and river bottom lands in this area, Pride of Saline and similar varieties made the best records.

In variety tests of corn conducted at the Fort Hays Branch Experiment Station, located in west central Kansas, a larger number of varieties were included than in the cooperative tests. Also the work extended over a longer period of time.

It will be noted that in tests conducted in seasons favorable for the production of corn; namely, 1907 and 1915, and in the bottomland test in 1910, the medium-sized varieties made the best yields, while in the less favorable seasons, i. e., average seasons for western Kansas, the early varieties produced best. The corn crop was practically a failure in 1911, 1913, 1916, 1917, and 1918.

The bottom land on which tests were conducted in

1906, 1907, 1910, and 1915 was a sandy loam, well adapted to the production of corn. The upland tests were conducted on silty loam typical of the upland soils in that locality.

For growing on the upland, Freed White Dent proved to be the best variety that has been tested at the Fort Hays station, while Pride of Saline and an adapted strain of Iowa Silvermine produced best results on the creek bottom.

In western Kansas early varieties which mature in 100 to 110 days almost always give best results because of the short seasons and limited rainfall. Freed White Dent has given the highest average yield in experimental tests conducted in this area. Colby Bloody Butcher, and other earlier and smaller varieties, however, will probably prove more certain than Freed White Dent for the northern half of this area and throughout western Kansas.

The bulletin contains a full description and the history of each of the varieties mentioned, and is a booklet which will be of the greatest value to Kansas corn growers, and interest to those who handle corn.

WESTERN CANADIAN GRAIN MARKETS

Much has been heard of Vancouver as the logical outlet for western Canadian grain, particularly during the winter season. Large purchases are reported to have been made by Oriental buyers and some cargoes are being shipped to Europe via Panama Canal. From the commencement of this movement in October, to December 19, shipments by ocean steamers were: Wheat, 532,008 bushels, of which 245,198 went to Japan, 176,277 to the United Kingdom, and 110,533 to Holland. Further supplies are en route to and accumulating at Vancouver for future shipments.

During the past calendar year, receipts and shipments at Fort William and Port Arthur were the third highest in the port's history, only exceeded in 1915 and 1916, when Canada's record crop of 1915 was handled. During the year prices fell to lower levels than the most ardent advocates of liquidation could ever hope for. The wheat crop was the second largest the country ever produced, it is true, and while quantity would counterbalance loss in price to many, the phenomenal decline combined with high freight rates mean a heavy burden, if not actual suffering, to a great many more. The farmer is not by any means the only sufferer, however, for the very rapidity of the declines has meant that all engaged in the handling or manufacture of grain have had to assume a share of the losses between primary marketing and consumption.

The number of cars inspected during the month fell off considerably and, except for oats and rye, was lower than a year ago, also. The total of all grains was 29,133, as compared with 36,131 in November and 29,726 a year ago. Of a total of 22,732 cars of wheat, 15,321, or 67.4 per cent, grades into contract grades, as compared with 23,294, or 75 per cent, a month ago and 19,805, or 83.8 per cent, a year ago. The number grading "no grade" on account of excess moisture increased to 2,255, or 9.9 per cent of the total.

THE CARE OF CEMENT FLOORS

In many cases, cement floors which have been improperly laid, and which, because of drying too quickly, are porous and weak, wear easily under usage and cause what is known as "dusting," says *Wallace's Farmer*. This condition, according to experts of the Portland Cement Association, Chicago, Ill., can be remedied as follows:

"Wash the floor thoroughly with clear water, scrubbing with a stiff broom or scrubbing brush, removing all dirt. Allow the surface to dry. Mix one part of water glass (sodium silicate) of 40 degrees Baume, with three to four parts of water, total four to five parts, depending upon the porosity of the concrete. The denser the concrete, the weaker the solution required.

"With a brush apply one coat evenly over the entire surface. This will penetrate into the pores of the concrete. Allow the concrete surface to dry; after 24 hours apply another coat the same as before. Again allow the surface to dry, and apply another coat. If after 24 hours the third coat is

not flush with the surface in any part of the floor, apply another coat. That which remains on the surface can readily be removed, thus evening up the floor. That which has penetrated into the pores has come in contact with the alkalis and salts in the concrete and formed into an insoluble, very hard mineral glue.

"If there is any trucking over the concrete floor, the dust in it can very largely be reduced by turning the edges of the truck wheels. This obviates the abrasive action of the sharp edges of the wheels on the concrete."

While the sodium silicate does form a sort of a hard mineral glue which hardens the surface of the concrete and prevents dusting, such treatment has little effect in waterproofing the concrete. Repeated tests by the United States Bureau of Standards show that a cube of 1:2:4 concrete stored in air one day, six days in sodium silicate and two days in water absorbed 5½ per cent of its weight in water, as compared with an absorption of 6 per cent of its weight of a similar cube which had not been treated with the sodium silicate. This difference is almost negligible and there probably would be no noticeable difference in a treated floor so far as water seepage is concerned.

FIGHTING WHEAT DISEASES*

The average annual production of wheat in this country for the four-year period beginning 1916 was 783,849,500 bushels. During this period the average annual loss from diseases was probably 140,000,000 bushels. If this loss could have been saved and the wheat milled, it would have produced about 29,000,000 barrels of flour, which, at \$12 a barrel, would have an approximate value of \$350,000,000. To check diseases and save as much as possible of this loss is one of the biggest problems of the department of Agriculture. Money spent on disease-control is money well spent.

The campaign to eradicate the black stem rust is an illustration of what the Department is doing along this line. It is estimated that in 1916 this disease caused a loss amounting to 160,000,000 bushels of wheat in the United States and 100,000,000 bushels in Canada. Practically every year it exacts an enormous toll from wheat growers.

Pathologists have known for many years that the common barberry was the alternate host for black stem rust, and have reported many observations of cereals and grasses more severely rusted near infected barberry bushes than elsewhere. They have learned that both the green-leaved and the purple-leaved forms of the barberry are equally susceptible to rust, but that the widely introduced Japanese barberry is immune. Since investigations were begun many striking examples have been studied and mapped, showing the first spread of rust from rusted barberries to adjacent grass or grain and the continued spread as the season advanced. It has been possible to trace infection from barberry bushes outward for distances of more than a mile. Investigations in all the important northern wheat-growing states, have, I think, plainly shown the damage done by the barberry.

Black stem rust produces two kinds of spores, the red or summer spores, and the black or winter spores on grains and grasses, besides the yellow or cluster cup spores on common barberry. The red spores produce the rust directly on wheat and other grasses. The black spores can produce the rust only on barberry. Wherever the red spores over-winter, therefore, rust can start without the barberry. Careful experiments conducted through two and three seasons at scores of points prove that under average conditions the red spores do not over-winter north of about latitude 39°, or the south line of Ohio, Indiana and Nebraska. Below this general line rust is carried from one season to the next by red spores, but the danger is minimized by the fact that the wheat grown is Winter wheat exclusively, which ripens so early that the rust epidemics usually do not become severe in time to destroy it. In the North Central States,

on the other hand, where only the black or winter spores ordinarily over-winter, they start the rust on the barberry early in the spring and from the barberry it spreads to wheat, other grains, and grasses. This area includes the great Spring wheat belt where grain ripens late, giving the rust a long time in which to develop and epidemics an opportunity to become enormously destructive, as in 1904 and 1916.

After the discovery that the red spores rarely over-winter in the North, there still remained a possibility that red spores from the South might be carried into the upper atmosphere, blown far to the northward, and brought down with the rain on northern wheat fields. Preliminary experiments have been begun to learn whether this happens, and plans have been made for a study of spore distribution in different layers of atmosphere, by means of ingenious automatic spore traps carried on kites operated by the Weather Bureau, or on aeroplanes of the different air services. This work is just well begun, and has not so far indicated that spores are carried in great numbers in this way. On the other hand, continued study of the immediate origin of local rust outbreaks in the North show practically all of them traceable to barberry bushes.

In 1916 the United States Department of Agriculture, in co-operation with the Minnesota Agricultural Experiment Station, discovered that there were numerous forms of black stem rust. This is one of the most important developments in rust investigations in any country. It had been thought that black stem rust was the same everywhere. It was known, however, that varieties of wheat shown to be resistant in one state or section were badly attacked when grown in another state or section. Research on these has resulted already in the determination of 32 different strains or biological forms in this country. Under the microscope they look alike and can be separated only by growing them artificially on a series of wheat varieties and wheat allies, like emmer and spelt, on which these different forms react differently.

After determination of a form, the next step is to map its distribution, which is a slow and laborious process. Rust specimens must be collected from many localities and grown on the series of determining host plants, which requires weeks of tedious experiments. Some of these forms have been found to be apparently of local distribution, while others grow over a wide range of territory; and the work is still in progress. The existence of these numerous forms makes the development or breeding of rust-resistant varieties a very complex and difficult problem. It has long been known that certain groups of wheat, for example, are more resistant than other groups such as the common or bread wheats. It is known also that certain varieties of pure-line strains are much more resistant than others. The cause of resistance, however, has not been known. In the case of early maturing varieties, what has been called resistance usually is not true resistance, but escaping late epidemics by early ripening. The two most probable causes of resistance are differences in structure of the wheat plant and differences in its chemical constitution.

Several varieties of wheat resistant to one or more forms of stem rust now are being grown commercially. Of Kanred, developed in Kansas, it is estimated that about 2,000,000 acres were grown in 1921. Kota, a Hard Red Spring wheat developed by the Department, has just reached the commercial stage in North Dakota. Among the rust-resistant varieties of the Durum wheats are Acme, developed co-operatively in South Dakota; Monad, developed co-operatively in North Dakota; and Lindum, developed by the Minnesota Experiment Station. Pentad, or D-5, developed in North Dakota and usually known as Red Durum, is very rust-resistant, but of poor milling quality. All of these varieties are grown commercially in the states named. The development of rust-resistant varieties which are also good milling varieties will take time, patience and hard work; but that is the sort of task that challenges the real scientist.

Following the extremely destructive rust epidemic

of 1916 and the rust investigation instituted immediately thereafter, a strong sentiment for the eradication of the common barberry developed in the Upper Mississippi Valley. As a result, an appropriation of \$150,000 was made by Congress for the fiscal year beginning July 1, 1918, and has been continued annually since. The campaign was outlined to cover 13 north-central states: Colorado, Illinois, Indiana, Iowa, Michigan, Minnesota, Montana, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin, and Wyoming.

Field investigation was begun immediately to determine the distribution and abundance of barberries and widespread publicity was employed to bring home to every person in city, town and country alike, the relation of barberry to black stem rust and the necessity of destroying the barberry to protect the wheat crop. During 1918 and part of 1919, strong effort was made to eradicate the barberries in all cities and towns of the 13 States.

Beginning in 1919, a comprehensive farm-to-farm survey was begun, in the progress of which not only the farmsteads but all woodlands were scoured to locate cultivated and escaped barberries. By the end of 1920, approximately 180 counties, or about 20 per cent out of a total of 830 counties requiring survey, had been covered by this comprehensive and intensive plan. To the end of 1920 about 5,500,000 bushes had been located. Practically all of those located had been eradicated.

KANRED A GOOD VARIETY

Kanred is a wheat which is resistant to prevalent forms of leaf and stem rust, is less liable to winter killing than the Turkey or Kharkof, and matures from one to four days sooner than those varieties, which sometimes means escape from bad weather conditions. It outyields the varieties named in the principal Hard Winter wheat section by from three to five bushels per acre. The variety was developed from a single head of Crim-ean wheat, selected at the Kansas Agricultural Experiment Station 10 years ago, from which source it is estimated that 2,000,000 acres were harvested in 1921.

"Kanred Wheat," is the title of Department Circular 194, just issued by the United States Department of Agriculture. Kanred is a Hard Red Winter wheat very similar to Turkey. It is bearded and has hairless white chaff. The superior yields of the Kanred variety in northern and northwestern Kansas, eastern Colorado, southwestern Wyoming, and in Nebraska and South Dakota appear to have been due largely to its resistance to rust and to winter killing.

Kanred wheat may be grown with success wherever other Hard Winter wheats are grown, and should partly replace the Turkey and Kharkof varieties now widely grown. It shows no special advantage in the northern Great Plains and the Pacific Northwest. It cannot compete with the Soft Winter wheat varieties grown on the lower lands and the richer soils of eastern Kansas or the eastern United States, and is not winter hardy enough to replace Spring wheat in the northern Great Plains. Wherever Turkey or Kharkof Hard Winter wheats are grown, however, the Kanred can be grown with equal chances of success.

In milling and baking experiments Kanred has compared favorably with other Hard Red Winter wheats. For successful growing, pure seed is necessary and, because of similarity of the seed to other varieties, certification has been found essential. This certification is made by the Kansas Crop Improvement Association with the co-operation of the Kansas Agricultural Experiment Station.

IN consequence of the large shipments westward from the Canadian prairie provinces, an embargo has been placed upon all shipments to the Pacific Coast. About 1,200 cars are believed to be in transit to Vancouver.

THE 1921 wheat production of North Manchuria is estimated at 200,000 tons, of which 150,000 tons is required for seed and domestic mills. The surplus is in strong hands and is being held at a high price in anticipation of demand from Russia.

*From an address by Secretary of Agriculture H. C. Wallace before an assembly of grain dealers and millers.

NEWS LETTERS

DULUTH

S. J. SCHULTE CORRESPONDENT

CORN has been topping the list of daily receipts of grain on this market for some time back. The Globe Elevator Company set the ball rolling during the fall in bidding up for corn and other operators have since been following suit. Receipts of corn have run up as high as 155 cars daily during the last 10 days and elevator stocks of it have been run up to over 5,200,000 bushels. The great bulk of the corn in store here was bought for shipment to the East at the opening of navigation. No. 2 Yellow spot corn is being handled at present at a basis of 7½ to 8 cents under Chicago, and No. 2 Mixed at 8 to 8½ cents under Chicago. Commission men are sanguine that export demand for flaxseed will be good in the spring.

Business is running smoothly in this market under the Future Trading Act. All the grain houses are keeping records of their individual daily trades, so that they are available at any time. The experience of operators is that through the elimination of speculation to a great extent, buying power has been lacking, so that deeper price recessions have come about at times when the market has been caught bare of orders to absorb a selling out of the ordinary run in volume. It was mentioned, for example, that there has been no trading in the May Spring future in several weeks for the reason that marketings of Spring wheat here have limited to the current requirements of local millers and hedging sales upon the purchases have been put through elsewhere.

R. M. White of the White Grain Company, asserted that the hay department of his house has been busy as a result of an active demand from dairying interests over the district. Buyers have all been pressing for prompt deliveries lately, having been apparently driven into a panicky frame of mind on account of fears that the railroads might not be in position to handle shipments promptly. The market in hay was advanced twice during the last month, the quotation in No. 1 Timothy being \$20. The oats market is friendless, according to Mr. White. In spite of their low price basis, dealers have been buying them sparingly so that even the few cars arriving from the country daily have been found difficult to place. Stocks of oats in the elevators here now aggregate 5,900,000 bushels and so far holders have been unable to find any working selling basis for them. Operators have all along been pinning their faith upon an export demand developing around the opening of navigation.

Complaint has been filed with the Minnesota Railroad and Warehouse Bureau that the force employed at the grain sampling bureau here is inadequate to handle any rush of receipts, so that heavy losses were entailed upon shippers and handlers during the recent falling market owing to delays in getting inspections through.

In spite of low prices and discouraging conditions during the early part of the season receipts of grain on this market have made a better showing this crop year than some of the experts had expected. From August 1 last to March 8, they aggregated 70,416,225 bushels, as compared with 56,474,670 bushels up to the same period last year. Wheat receipts were 41,586,115 bushels, against 34,959,316 bushels last year. Of that Durum receipts this year came to 27,863,774 bushels, an increase of 5,000,000 as compared with up to the same period last year. The outstanding feature was the movement of corn, its receipts aggregating 7,892,000 bushels as against only 413,219 bushels last year. Stocks of all grains in the elevators here now aggregate 16,000,000 bushels or little more than half their registered storage capacity.

Percy Fuller, formerly with the American Linseed Company here, but now manager of that concern's Winnipeg office, was a recent visitor on this market. He asserted that the outlook is bright for a fair movement of flax seed to the lake terminals between now and the opening of the navigation season. From reports received from correspondents, he estimated that

from 1,000,000 to 1,500,000 bushels of flaxseed remains to be marketed in the three Canadian provinces, and it is thought that a rush will be made to move it out from interior points as soon as the roads become passable up there. He predicted that higher prices still would be established in flaxseed in view of the limited supplies of it being carried at the terminal markets and in public elevators in Canada, and in this country taken in conjunction with the improved demand for linseed oil and the quantities of oil contracted for May delivery by crushers. Canadian growers claim that the price spread of flaxseed over Spring wheat is not sufficiently attractive in view of the extra cost of growing flax and preparing it for the market afterwards. He mentioned that the American Linseed Company, and Spencer Kellogg & Co. now are operating in the flaxseed trade on the Winnipeg market. Though the American Linseed Company closed up its Duluth office a year ago it is still buying on it through commission houses.

Practically no changes have been announced recently in the personnel of houses operating on this market or in representatives on the trading floor of the Board of Trade. Logan & Bryan of Chicago have been elected to corporate membership on the Board.

G. H. Spencer of the Consolidated Elevator Company received congratulations of members of the Board of Trade recently on the occasion of the arrival of a young son at his home. In keeping with the time-honored custom, he set up the cigars for the crowd.

Duluth has been fully maintaining its standing as a Durum market this winter. Good premiums have been current and considerable Durum has been bought to arrive recently in response to an active inquiry from exporters for grain for shipment at the opening of the lake navigation season. From two to 12 cents over the May price has been paid for No. 1 Durum lately, and it is predicted in some quarters that a still more attractive basis will be set.

Considerable Durum has been taken by the mills here for the making of macaroni flour so that stocks have not been accumulating to any extent. They now approximate around 2,000,000 bushels. From information received by houses specializing in that market it has been estimated that around 12,000,000 bushels of last season's Durum crop remain at interior points in Minnesota and North Dakota to be marketed. Authorities are of the opinion that a larger acreage than last year will be seeded to Durum in this territory this spring in view of the better production results as compared with Spring wheat in the dry areas of the country.

A representative of a Buffalo milling establishment who visited this market recently appeared disposed to criticize the attitude of the trade here in not meeting the high premiums that have been offered elsewhere to attract Spring wheat this way from over the Northwest. He was informed that in past seasons the elevator interests set high premiums for Spring wheat only to find eastern millers backing away from it and leaving them to hold the bag. "The elevators have lost considerable money in bidding up for Spring wheat in other years, and as a result their managements decided to pursue a conservative policy this season," said an official of one of the elevators. He pointed out that elevator men and commission houses on this market stand ready at any time to buy any kind of wheat, but they want to know that millers will be ready to take it off their hands.

Operators here complain that they have for years been compelled to put up an everlasting fight with the railroads to enable them to hold their rightful advantage over Minneapolis as rail and lake distributors of grain. While the present differential on the rate for grain from this market via the lake is considered sufficient to win the traffic for this route, it is claimed that operators here have not enjoyed the full advantage that should have accrued to them on account of the efforts of the railroads to route the traffic with a view to obtaining the longest possible mileages over their systems. The latest development in that connection was a decision of the Interstate Commerce Commission denying an application of the Soo Line to put into effect a new schedule of rates on grain from Minneapolis to the Atlantic Seaboard. It is claimed that the proposed rate structure would have upset the differential in favor of this point for lake and rail shipments to the East.

PHILADELPHIA

T. A. SIEBER CORRESPONDENT

ACCORDING to the monthly report of the statistician of the Commercial Exchange, the stock of grain in public warehouses in Philadelphia on March 1 was: 1,886,597 bushels wheat, 759,789 bushels corn and 233,097 bushels oats, compared with 2,080,117 bushels wheat, 477,955 bushels corn and 248,093 bushels oats on February 1, and 1,029,190 bushels wheat, 1,056,078 bushels corn and 259,962 bushels oats on March 1, 1921. Receipts of grain at Philadelphia during the month of February, 1921, were 3,168,906 bushels wheat, 2,419,427 bushels corn, 150,135 bushels oats, 97,333 bushels rye and 1,496 bushels barley. Exports from this port during the month of February, 1921, were: 2,697,964 bushels wheat, 1,881,030 bushels corn and 88,000 bushels rye.

New memberships in the Commercial Exchange have been petitioned for during the past month by Thomson & McKinnon, M. J. Goehl, John R. Gillespie, Michael E. Price and American Stores Company.

John O. Foering, retired chief grain inspector of the Commercial Exchange, has returned from Dunedin, Fla., where he has been since last fall.

John K. Scattergood of the grain and feed firm of S. F. Scattergood & Co. in the Bourse, left March 1 for Pinehurst, N. C., for a stay of one month.

Harry W. Koch, head of the firm of H. W. Koch & Co., grain merchants, has returned to his office in the Bourse, having been confined to his home for the last two weeks with an attack of grippe.

Horace Kolb, long established in the grain and feed business at 3047 Chestnut Street, Philadelphia, Pa., has discontinued that business and will now use his building for the manufacture of candy.

Charter has been filed with the Governor of Delaware by Postum Cereal Company, Inc., for the purpose of manufacturing food products. The capital is \$7,000,000.

Embargo No. 5610, recently placed by the Philadelphia & Reading Railway Company, covering all shipments of flour and feed consigned, reconsigned or to be reconsigned to H. S. Beidler, Doylestown, Pa., has been entirely cancelled.

Rice, Unruh & Co., and Susquehanna & New York Railroad were recently elected to membership in the Commercial Exchange.

Woodward & Co., have purchased the feed store of V. E. Bond, located at Darby, Pa. This is the eleventh store operated by Woodward in Pennsylvania on the cash and carry plan.

Lawrence H. Hansberger, aged 62 years, of Kansas City died suddenly at Cincinnati, Ohio, recently. Mr. Hansberger was for many years Philadelphia representative of the Cornfalfa Feed Milling Company, where he was well known in the feed trade. At the time of his death he was a representative of the Omaha Alfalfa Milling Corporation.

George C. Shane and Fred O. Shane, formerly of the firm of Shane Brothers & Wilson Company of Philadelphia, Pa., are now connected with The Reserve, Inc., of the Rumely warehouse in North Kansas City. George C. Shane has been appointed president and Fred O. Shane, vice president.

The business name of the Harrisburg Grain & Feed Company will in the future be carried on under the trade name of James W. Barker, successor to Harrisburg Grain & Feed Company, located in the Harrisburg National Bank Building, Harrisburg, Pa.

According to the Bureau of Market and Crop Estimates of the Department of Agriculture, the stock of wheat on farms in Pennsylvania on March 1 was 5,962,000 bushels compared with 7,945,000 bushels for the same period last year and the percentage of this crop

March 15, 1922

shipped out of the county where grown was 38 per cent in 1921 compared with 37 per cent in 1920. Stocks of corn were 32,024,000 bushels compared with 30,109,000 bushels for the same period last year and the percentage of this crop shipped out of the county where grown was 90 per cent in 1921 compared with 85 per cent in 1920. Stock of oats were 14,466,000 bushels compared with 21,707,000 bushels for the same period last year and the percentage of this crop shipped out of the county where grown was 6 per cent in 1920.

A suit of \$14,929 against the Philadelphia & Reading Railway has been won by Charles S. Kalbach, a grain dealer of Richland, Pa. Mr. Kalbach's grain elevator was destroyed by fire last March and he claimed the fire was caused by sparks from a passing locomotive.

Charles W. Kolb, aged 58 years, died February 14 at his home in Collingswood, N. J. Mr. Kolb was formerly the hay inspector of the Commercial Exchange, but entered the services of the Government during the war in the Forage Department and was located at Newport News, Pa. Previously to entering the services of the Exchange he was an inspector of hay for the firm of E. H. Price. He is survived by a widow.

Philadelphia shippers were recently notified by the Chamber of Commerce of proposed important changes in freight rates upon which they will have a hearing before the Trunk Line Association in New York.

Philadelphia receivers of flour have been advised by the Flour Committee of the Commercial Exchange that on and after March 1, 1922, no flour will be inspected unless permission is indorsed on the original bill of lading or given in writing by the shipper, or the bill of lading is surrendered to the railroad company.

Norwood P. Holland, aged 49 years, died February 21 at his home in Philadelphia, due to pleural pneumonia. Mr. Holland has been a member of the Commercial Exchange since 1901, having served on the Hay and Straw Committee for several years. He was for several years manager of the hay department of E. L. Rogers & Co. in the Bourse until his recent appointment as manager of the firm, which position he held at the time of his death. About a year ago he was confined to his home for several months and previous to his death he was sick for about two weeks. He is survived by a widow and one son.

The number of cars unloaded at the Girard Point Elevator during the month of February, 1922, was: 1,190 wheat, 614 corn and 7 rye; at Port Richmond Elevator: 798 wheat, 846 corn and 79 rye; at Twentieth Street Elevator: 13 corn, 52 oats, 1 rye, 2 buckwheat and 2 barley and barley screenings.

American shipping was the topic of a four-day convention held at Washington, D. C., March 1 to 4, and Philadelphia was represented by Emil P. Albrecht, president of the Philadelphia Bourse. Mr. Albrecht is a director of the National Rivers and Harbors Congress and a member of the governing council of the National Merchant Marine Association.

Representatives of the Commercial Exchange and other trade organizations in Philadelphia and Baltimore recently met in the office of William A. Glasgow, Jr., counsel for the Exchange, to continue plans for the fight to protect the port differentials now in favor of Philadelphia and Baltimore, which are attacked by interests in Boston and New York. Mr. Glasgow will represent the local trade organizations when the matter comes before the Interstate Commerce Commission, hearing of which will be held on April 10. Embargo placed by the Philadelphia & Reading Railway on carload export freight moving on through export bills of lading is extended to cover all shipments of bulk grain consigned to Philadelphia for export or to Port Richmond Elevator, Philadelphia, Pa., moving on either through export bills of lading or domestic bills of lading. All applications for permits should be addressed to O. W. Stager, Permit Bureau, Philadelphia & Reading Railway Company, Room 611, Reading Terminal, Philadelphia, Pa.

The Eastern Federation of Feed Merchants called a conference of all eastern feed dealers at Binghamton, February 14 and 15, which was attended by C. W. Wagar, S. A. King, S. F. Scattergood and Wm. Scattergood, representing Philadelphia. Professor Davis of the Connecticut College of Agriculture explained the study the college is making of the cost of the conducting a retail feed and grain store. There was also discussions held on "Retailers' Merchandising Problems" and of "Delivery Cost." The meeting was in the nature of a test of the appreciation of eastern feed dealers for the work the Federation is doing.

Philadelphia hay merchants were represented by Joseph A. Huey at a meeting of hay dealers and producers before the Interstate Commerce Commission recently in the general investigation of transportation rate levels who asked for a removal of all the increases in freight on their products which have been instituted since 1920. W. I. Biles, president of the National Hay

Association, said that the higher freight rates of recent years had localized the hay business. Reductions of 10 per cent and 16 per cent in the rates granted during the last six months has stimulated the movement of hay, but not restored the industry to normal.

Waldo O. Fehling, chairman of the Feed Committee of the Commercial Exchange, advises that certain handlers of feed are shipping into Pennsylvania feedstuffs that have not been registered in the state and also using metal fasteners, the use of which is strictly prohibited in the state which provides heavy fines for violation of this law; that Durum feeds have been shipped on Spring wheat feed contracts, which is not permitted under the new "National Rules Governing Transactions in Feedstuffs," unless so specified at time of sale and the attention of feed jobbers is directed to these various matters in order to avoid friction with the Pennsylvania feed laws so that they can protect themselves against the violation of these rules by western shippers.

The Fourth Annual Dinner of the Flour Club of Philadelphia was held February 27 in the Sun Room of the Bellevue-Stratford Hotel which was elaborately decorated for the occasion. The dinner was attended by over 100 flour merchants and their guests and among those present were Hubert J. Horan, president of the Club, who acted as toastmaster; George Dallas Dixon, vice-president of the Pennsylvania Railroad; Richard Spillane, of the Philadelphia Public Ledger; Thaddeus S. Dayton, of the Foreign Trade Association; H. DeWitt Irwin, of the firm of Barnes-Irwin Company, Inc.; A. W. Mears, president of the Baltimore Flour Club. There was also a large representation from the Commercial Exchange.



PLANS for the construction of 15 new type grain carriers to be equipped with Diesel electric drive to cost \$5,000,000 have been approved by the Central Steamship & Commerce Corporation of New York. The ships will be of New York State Barge Canal size and will engage in the grain carrying trade between Chicago, Milwaukee and uplake ports and New York City. Contracts have not been awarded but Theodore D. Wells of New York, naval architect, has completed the plans. The vessels will be of a new type designed for operation through the Welland Canal or the New York State waterways. They will have practically no superstructure. They will be 257 feet long, 42-foot beam and 18 feet deep. The main power plant will develop 1,300 electrical horsepower. The ships will be of steel of staunch construction for deep sea service and will be rated by the American Bureau of Shipping. It is planned to have the ships load grain on the upper lakes for delivery at the Atlantic Seaboard. The new Gowanus Bay Elevator of the New York State Department of Public Works will probably be the eastern terminus of the new line.

The Grain Shovelers' Union has approved of an agreement with the terminal elevators for a working agreement next season. Simon O'Brien is president of the union. He looks for an early movement of grain down the lakes to Buffalo this season.

The work of building two new marine legs and steel towers for the Mutual Elevator has been started by the Monarch Engineering Company. The new parts were planned by Harry Waite, president of the corporation, and will be of an improved design. The old towers were razed by a gale last winter. The towers will be 13 stories high and the legs will be 10 feet longer than the old ones. This means an increased ability to dip, and will be a big improvement to the elevator generally.

Negotiations which have been in progress for some time and which had been reported closed some time ago, have finally been completed between the American Maltng Company and the Electric Steel Elevator Company, of Minneapolis whereby the latter company on April 15 will take over the Buffalo plant of the maltng company. The purchase price was not made known. The elevator has a capacity for 2,000,000 bushels with one marine leg. Extensive improvements are planned to the structure when the new owners take possession next month. It is reported that George Martin will be retained as superintendent but several changes will be made in the working force at the plant.

Very little grain remains afloat in vessels which had winter storage cargoes in the Buffalo Harbor. Steamers have been discharging their cargoes at a rapid rate during the last month. All of the boats will be ready for the opening of navigation next month. Although many boats have been lined up to carry grain during the opening weeks of navigation,

other owners are holding off for higher rates. Grain shippers have been offering 2½ cents for shipment down the lakes at the opening of the season. Vessel owners are not in any hurry to charter ahead at that figure for they realize that with millions of bushels lying in the terminal elevators at Lake Superior ports, shippers will have to bid up in order to get early tonnage. Statements received by Buffalo vessel men say that early this month there were almost 15,000,000 bushels in Duluth-Superior elevators as compared with half that amount a year ago. The elevators at Port Arthur and Fort William at the same time had 31,000,000 bushels in storage, which is just slightly under the amount in storage during the corresponding period of 1921.

Edwin T. Douglas, manager of the Concrete-Central Mutual Grain Elevators, has returned from a tour of Europe. Mr. Douglas took on weight and looks fit for another hustling season at the big terminal elevators.

Joseph Scott has resigned as assistant manager of the States Marine & Commercial Company, Inc., to become manager of the steamship department of the Transmarine Corporation, a subsidiary operating company of the Submarine Boat Corporation. The Transmarine Corporation operates a fleet of canal-size grain carriers from the head of the lakes to the Atlantic Seaboard via Buffalo and the New York State Barge Canal and the Hudson River.

At the investigation into the affairs of the Curtiss Grain Corporation before Referee James W. Persons in Bankruptcy Court, the trustee informed the referee that officers of the corporation have declined to appear and testify because it might incriminate themselves in an investigation which has been started into the company's affairs by the United States District Attorney. Witnesses called by the trustee at the investigation testified that the corporation had been insolvent for a long period of time and had been losing money at the rate of almost \$5,000 a month for about a year. This was due to the fact that the company had contracted for screenings at a high figure and when the market price dropped, the company was forced to continue buying at the high figure.

Dudley M. Irwin, grain broker in the Chamber of Commerce, testifying at the bankruptcy proceedings of the Steuben Products Company, Inc., before Referee James W. Persons, declared that the Irwin Grain Company is owned and controlled by the bankrupt corporation. As the result of this statement, Assemblyman George Rowe, counsel for certain creditors of the Steuben Products Company, asked that the trustee make an investigation of the affairs of the Irwin Grain Company to determine if there are any assets which might be taken for the benefit of the creditors of the Steuben company. Mr. Irwin testified that he is in the grain brokerage business and that the Irwin Grain Company has practically no assets and owes under \$5,000. Mr. Irwin through his counsel, sought to compromise the claim of the bankrupt corporation for \$40,000 against him. Mr. Irwin was vice-president of the Steuben Products Company for which he received a salary.

The foundation for the grain elevator to be constructed by New York State at the Port of Oswego on Lake Ontario has been started. The foundation consists of a series of circular concrete piers which are being constructed by driving steel sheet piling to bed rock. Due to lack of funds the state engineer's office has put off advertising for bids on the concrete structure itself and this may not be started within another year or 18 months, it is stated.

The Archer-Daniels Linseed Company, which controls the Dellwood Elevator on the Hamburg Turnpike and Buffalo Creek, has awarded the contract for a new elevator unit of 750,000 bushels' capacity. The new addition will then give the Dellwood Elevator a holding capacity of about 2,000,000 bushels. The Fegles Construction Company of Minneapolis has the contract and already has started work on the new structure. It will be ready for operation about the latter part of September. The new unit will have a marine leg and tower of the most improved design. The company's new elevator at Edgewood, N. J., with a capacity of 500,000 bushels is rapidly nearing completion and the company plans to enlarge that structure with a new 1,500,000-bushel elevator within a very short time.

The entire plant arrangement of the Dellwood Elevator at Buffalo will be modernized to make it possible to handle canal grain cargoes with ease and dispatch. At a conference between D. P. Fegles, head of the construction company, and Frank M. Williams, New York state engineer, the grain handling situation in the Buffalo Harbor as it relates to the barge canal traffic, was thoroughly discussed and the state engineer was assured that the Dellwood Elevator will co-operate in making a specialty of handling canal grain cargoes at the new plant.

One of the outstanding features of the new unit will be the facilities for transferring grain direct from lake vessels to barges at the rate of 20,000 bushels an hour. This will greatly facilitate the handling of waterborne grain cargoes. A statement

issued by the state engineer's office says that "up to the present the fact that the majority of Buffalo elevators are controlled by or allied to the railroad interests, has made the handling of grain at the lake ports a serious problem with the barge line operators. The Dellwood Elevator Company, is an independent concern and while it will handle rail as well as canal shipments, the new development is one that will have a direct and far reaching effect upon the barge canal and its operating companies."

N. F. Webb of Cortland was elected president of the Co-operative Grange League Federation Exchange, Inc., at the annual meeting held in Binghamton. With one or two exceptions the entire 1921 slate of officers was re-elected. The league operates a series of grain elevators and feed plants throughout the state for the benefit of its members. Other officers chosen include, Harry Brown, Waterport, vice-president; Raymond Hitchins of Syracuse, secretary and treasurer; E. C. Weatherbee of Syracuse, assistant secretary; and the members of the Executive Committee are Mr. Webb, Harry Bull, Campbell Hall and George Kirkland.

Buffalo grain shippers have received notice of a change of far reaching importance in the organization of the Montreal Harbor. The old system of individual control of the various departments is superseded by the concentration of the full executive authority in the hands of the general manager, to which position, M. P. Fennell, formerly secretary-treasurer of the commission, has been appointed. He has general supervision over all docks, elevators, vessels, railways, storage sheds, etc. Captain J. F. Symons succeeds Captain Bourassa as harbor master and F. W. Cowle becomes consulting engineer. Conflict of authority is avoided in the new arrangement which is modeled after the plan in effect at many British and European ports.

The firm of Ewart & Lake which has conducted a grain and feed business in Groveland, N. Y., for a number of years has been incorporated under the name of Ewart & Lake, Inc. The personnel of the company remains the same. Orrin C. Lake is president. The corporation takes over the warehouse, milling, merchandise and grain business of the old firm valued at close to \$180,000.

Maxwell M. Nowak has obtained control of the plant of the Curtiss Grain Corporation of Buffalo, whose affairs are being liquidated in bankruptcy court. The plant will be operated by the Nowak Milling Corporation of which Mr. Nowak is president. The purchase was made in Bankruptcy Court in order to protect the mortgage held by Mr. Nowak's company. The business was originally started by Albert Nowak, father of Maxwell M. Nowak, about 25 years ago on a very small scale. In 1919 Mr. Nowak purchased a 7½ acre plant in Hammond, Ind., and operated it as a branch of the Buffalo concern. A short time later he organized a chain of banks in western New York and sold the Buffalo plant to the Curtiss Grain Corporation but retained his interest in the Hammond property. Mr. Nowak has given up his banking interests and the banks have been merged with the Buffalo Trust Company. He will move the headquarters of the grain business from Hammond to Buffalo and the Buffalo plant will be in operation within 30 days. The property is on the New York Central Railroad and is worth about \$1,000,000. The plant has a capacity of 40 cars a day.

NEW YORK

C. K. TRAFON - - CORRESPONDENT

MEMBERS of the New York Produce Exchange were greatly interested early this month by the following notice which was displayed on the official bulletin boards:

At a meeting of the Board of Managers held this day the following general rule was adopted to take effect after having been posted 10 days ago:

All quotations and statistical information posted on the floor of the Exchange are for the legitimate use of members only. Their distribution, directly or indirectly, to any individual, firm, corporation or association engaged in any form of illegitimate business is prohibited. Breach of this rule shall be deemed misconduct and subject the offender to the penalty prescribed in Section 32 of the By-Laws."

It was the general impression that this action was the result of the various conferences held recently between Produce Exchange officials and representatives of the New York Stock Exchange and other commercial bodies. Among the latter was John R. Mauff, secretary of the Chicago Board of Trade. Mr. Mauff, who has paid several visits to the Exchange recently, stated that gratifying progress had been made in the fight to eliminate bucket shops. In a number of cases, it was said, grain tickers had been taken away from certain

undesirable subscribers. There is no doubt but that all exchanges will co-operate to this end.

W. E. Murphy of Philadelphia, assistant secretary of the Horse Association of America, who was a recent visitor in the local grain and feed market, stated that his association had made good progress in stimulating more active employment of horses, especially on short hauls.

O. M. Mitchell, head of the old export grain house, Power, Son & Co., has been elected president of the North American Export Grain Association, Inc. W. H. Kemp of Milmine, Bodman & Co., is vice-president. Of course, George W. Blanchard continues secretary-treasurer, the dual office which he has filled so successfully for many years. This reorganization was primarily brought about by the fact that the association's old president, J. Ward Warner, has retired from active participation in the grain export trade, in which he has been a prominent figure for years. Notwithstanding his retirement from active business, Mr. Warner, who was formerly president of the New York Produce Exchange, will continue to take a lively interest in the affairs of the Exchange, as he has done so ably and unselfishly for years.

Richard J. Kaiser, for several years connected with the local office of the Armour Grain Company, is an applicant for membership in the New York Produce Exchange, joining the staff of assistants under the management of H. P. Mulhall.

Hans Simon, manager of the New York Office of L. Dreyfus & Co., large French grain merchants, returned to his post on the Produce Exchange early this month and received a cordial welcome from his many friends and associates. He had spent about two months traveling all over France, Belgium, Germany and England.

Wm. J. Ryan has been elected to membership in the New York Produce Exchange, where he will act as assistant to Nelson B. Haynor, manager of the local office of Thomson & McKinnon, commission merchants on the Chicago Board of Trade and other exchanges.

Crofton & Co. is the firm name of a new concern recently organized to do a general grain brokerage business. It is composed of C. B. Crofton and Henry Goldstein with offices in the Produce Exchange Building. Mr. Crofton has been in the grain business for 12 years, originally with the Brainard Commission Company, and afterwards with Lewis, Proctor & Co. Mr. Goldstein has been in the trade 16 years, latterly as one of the head men in the grain export department of P. H. Gray & Co. Previously he was with Milmine-Rodman & Co., Grain Growers Export Company and the Simonds, Shields, Lonsdale Grain Company. Both are young men with an abundance of vigor and enterprise, and being thoroughly acquainted with their business, they have bright prospects.

There was a large delegation of prominent grain men from Winnipeg on the Produce Exchange last month. Among them was W. A. Anderson of the North Star Grain Company, who was enroute with his wife and two daughters via the Panama Canal to Valparaiso, and from there over the Andes to Buenos Aires and back again via Rio Janiero. In the party will also be Donald Morrison of Donald Morrison & Co., grain merchants, formerly president of the Winnipeg Grain Exchange. In the party also was James Richardson of James Richardson & Sons, grain merchants, who returned to Winnipeg via Montreal.

Wm. H. Hayward, for many years active in the Baltimore flour trade as treasurer of the G. A. Gambrill Manufacturing Company, has been elected to membership in the New York Produce Exchange, having become manager of the flour and grain department of the Commercial Union of America.

Charles W. Chilcote, Jr., has become connected with the grain business on the New York Produce Exchange, acting as assistant to his father, who is a representative of the J. Rosenbaum Grain Company. It is expected that the young man's application for membership will be posted in the near future.

Among the recent visitors on the New York Produce Exchange were the following well known members of the Chicago Board of Trade: Frank L. Carey, president of the Nye-Jenks Grain Company, and also of Hallett & Carey Company, grain merchants of Minneapolis; T. E. Cunningham, a partner in the firm of Harris, Winthrop & Co., brokers and commission merchants; Howard Jackson of Jackson Bros. & Co., commission merchants; J. U. Crosby of the Arcady Farms Milling Company; R. W. Chapin, feed manufacturer and shipper; Samuel Mincer, well known grain operator.

The main building of the old grain elevator of Wm. H. Payne & Sons, located on the Harlem River at 129th Street, was practically destroyed by a four-alarm fire on the evening of March 7. About 75,000 bushels of grain were also destroyed. Owing to extremely high winds and a steady downpour of rain, the firemen had a stiff three-hour fight in subduing the flames, and

one man was severely injured when he lost his balance in the high wind and fell 20 feet to the pavement. Fortunately the marine leg of the elevator was not destroyed, and hence the company is able to do a little business in loading and unloading, although under considerable difficulty.

KANSAS CITY

B. S. BROWN - - CORRESPONDENT

THE recent revival in the exports of wheat at the Gulf ports has resulted in enough sales to relieve the congestion and the pressure to sell that has prevailed at Galveston and New Orleans nearly all winter. Premiums declined to the lowest basis of the season at one time and then made a moderate recovery. About a normal supply of grain is on track at Galveston, and the elevators, while full are not experiencing great difficulty in handling wheat. Much poor wheat is included in the supplies. During most of February when the big rise in wheat was under way there was practically no export demand. Much of the wheat sold recently was not hedged and was said to show substantial profits.

Wheat receipts at Kansas City last month were the largest ever reported in February, 5,658 cars, exceeding those of a year ago by about 800 cars and exceeding the 10-year February average by 3,462 cars. The big movement was something of a surprise to most receivers as there had been much comment on the small farm reserves in most parts of the Southwest. The sustained movement was generally attributed to attractive prices for wagonloads, more than \$1.20 at most points and up to \$1.35 for choice grain. This made the best market since early in the season and farmers showed themselves anxious to take advantage of it. Tight credit conditions were also a factor in the selling. Since the first of this month there has been a big slump in deliveries and it is not thought that the movement will show another increase this season.

Crop news has been in the foreground at Kansas City for several weeks, and has been an important factor in market fluctuations. The latter part of February general rains in the Southwest broke one of the longest winter droughts ever experienced. This was followed by several inches of snow, insuring the Winter wheat crop in most sections enough moisture to start the spring growth. The rains and snow were highly beneficial, but there is still a good deal of a mystery about the actual condition of the crop in the districts that had little moisture last winter. Much, it is feared, may not be able to revive. The area of unpromising outlook embraces southern Nebraska, Kansas, western Oklahoma and northern Texas.

E. M. Hibbs, formerly in charge of the mill feed department of the Kemper Grain Company, has opened a similar department with B. C. Christopher & Co.

The big \$7,000,000 plant of the Corn Products Refining Company in North Kansas City has started operations. About 300 men are employed at present. It is planned to increase the number to about 600 soon.

The Kansas City Board of Trade recently completed arrangements to send out by radio cash and future quotations, beginning with the opening at 9:30 o'clock and sending at intervals of half an hour, in about the same manner as was announced at Chicago, though the plan was adopted here first. A committee which was appointed to look into the matter received scores of replies from southwestern grain dealers as soon as the first announcement was made, urging that the plan be hastened.

The question of re-establishing the pre-war differential of 5 cents a hundredweight in favor of Galveston in export wheat rates to Galveston and Baltimore from Kansas City and other western points has again been brought up. The present differential is 8 cents in favor of Galveston. Complaints have been filed by the Baltimore Chamber of Commerce, Philadelphia, Chicago, Milwaukee and Indianapolis, asking that the old differential be restored. The Kansas City Board of Trade has taken no definite action yet.

D. F. Piazsek, for more than 22 years a member of the Kansas City Board of Trade, recently announced his retirement from the grain trade. He will spend most of his time in the development of a farm near Stanley, Kan. The Barnes-Piazsek Company, which he with Julius Barnes organized about two years ago, has been taken over by the Nye-Jenks Grain Company of Omaha and Chicago, and will be known by that name in the future. F. L. Carey is president. The Omaha concern is controlled by Julius Barnes who will retain an interest in the Kansas City organization. They will continue to operate the Wa-

bash Elevator. Most of the office force of the Barnes-Piazzek Company will be retained. Frank Blodgett will be the new manager. The Board of Trade membership held by George Vogt probably will be transferred to him. P. P. Allen will remain with the firm and probably William McNeil who holds a Board of Trade membership.

Mr. Piazzek gave up his business in the early days of the war to join the United States Food Administration Grain Corporation as a dollar-a-year man. He served as a second vice-president and manager of the Kansas City office, which handled millions of dollars' worth of wheat.

Grain shippers at Kansas City will protest the modification of the original order reducing rates from Kansas City, Minneapolis, Omaha and St. Louis to New Orleans and Mississippi Valley points, as announced recently by the Interstate Commerce Commission, and it is supposed shippers in the other cities will do the same. The modification means that grain can move South from country points near these markets at a much lower rate than from the central markets. If in effect long, the modified rate would obviously divert much grain from terminals. The difference from Kansas City to the south and from many nearby country points is as much as 12 cents a hundredweight.

Efforts of grain shippers at Kansas City to move grain in store under the reduced freight rates announced around the first of the year have resulted in the calling of a conference by the Interstate Commerce Commission for March 30 at which all evidence pertaining to the case will be presented. About 15,000,000 bushels of grain in Kansas City elevators will be affected in case shippers are allowed to issue new tonnage against it.

E. O. Moffatt, president of the Moffatt Grain Company for many years, has sold his membership in the Kansas City Board of Trade and will retire from active management of the concern. J. F. McElvain will assume management of the grain company. This is the second time Mr. Moffatt has retired. A year or so ago he sold his membership and announced that he would leave the grain business, but he was soon back. He recently helped organize a 3 per cent loan company and will probably devote a good deal of his time to this, in addition to travel. The membership was sold to F. T. Fisher, secretary and treasurer of the Corn Products Refining Company. This concern now has three memberships.

A. W. Stewart, formerly with the Twidale-Wright Grain Company, but now with Goffe & Carkener, has been elected a member of the Kansas City Board of Trade on transfer from George C. Martin, also with Goffe & Carkener. Stewart has succeeded Martin as cash grain buyer at Kansas City while the latter has gone to St. Louis where he will be a partner in the Martin-Knowlton Grain Company. The latter company will take over the office of Goffe & Carkener in St. Louis. Fred Hoose of the Norris Grain Company, Kansas City, is also interested in the new concern, which will represent the Norris company in St. Louis.

Harry G. Stevenson, formerly with the Stevenson Grain Company, has changed his representation from that concern to the Equity Union Grain Company. L. B. McBride, who has been on the floor for the Equity Union, has returned to his home in Norton, Kan. J. J. Knight has also joined the company, which recently increased its capital stock from \$20,000 to \$100,000.

E. D. Fisher, president of the E. D. Fisher Commission Company, who died recently, was one of the pioneer grain men of Kansas City. He was a charter member of the Board of Trade and was one of the few remaining members who held a \$25 certificate. Records of the old Chamber of Commerce, which later became the Board of Trade, show that he joined in 1888, though it is known that he was in the grain business several years before that. He was 80 years old. In addition to his grain interests he was a director of the First National Bank and president of the Lucky Tiger Mining Company. Resolutions of sympathy were sent his family by the Exchange. Mr. Fisher had been a director of the Exchange several times and had headed numerous important committees.

He was a member of the Blue Hills Country Club, the Kansas City Athletic Club and the Automobile Club of Kansas City. He came here 40 years ago from Jackson, Miss. A niece, Mrs. Charles B. Wilser, a nephew, J. E. Rahm, and five sisters survive. Mr. Wilser is a Kansas City grain dealer and Mr. Rahm is associated with E. D. Fisher Commission Company.

The Federal Court at Kansas City has appointed Walter Hinchman as receiver for the Kemper Grain Company in response to a petition filed by William Shaake, who alleged that the grain company was indebted to him to the amount of \$3,248, was insolvent and without funds to pay its obligations. The receivership was the result of losses sustained by the firm since last fall totaling about \$60,000, a sum

equal to the capital stock of the company, according to the preliminary investigation of auditors. The chief loss was at Great Bend, Kan., where the company maintained an office in charge of C. E. Lindberg, who has been discharged and his bond of \$7,500 paid. A bookkeeper in the Kansas City office also has been discharged. The company has been in business here for nearly 30 years. W. A. Hinchman is president and Fred Bedell is secretary, the two owning all the stock. Losses to creditors can be made good, according to Mr. Bedell, but it is not known if the company can continue in business after its affairs are settled. Included in the assets of the company is a 350-acre farm in Iowa worth about \$40,000.

The huge plant of the Corn Products Refining Company located in North Kansas City was put in operation March 6, following several weeks of preliminary tests of the machinery. About 600 men were employed at first. The plant covers 75 acres, embraces a score of separate buildings, has eight miles of switch tracks, and electric power, gas and water plants big enough to serve as public utility plants in a city of 20,000 or 30,000 inhabitants. At the outset the plant is using about 20,000 bushels of corn a day. This, together with the number of employees, probably will be increased in the near future.

The Kansas City plant will have three main products: Karo syrup, Mazola salad and cooking oil, and stock food. To keep a stock of corn adequate for a consumption of 20,000 bushels a day, elevator space of 242,000 bushels has been provided.

The refinery cost about \$7,000,000 and is said to be the largest initial industrial investment ever made in Kansas City. To provide for later growth an option is held on 50 acres adjoining. Officials say it is the newest and most modern syrup refinery in the world. Manual labor does not enter into the process of syrup making until the cans are filled and sealed and ready for packing.

From the outset the Corn Products Company is expected to be the largest buyer of corn on the Kansas City Board of Trade and the completion of the plant is regarded as of the greatest importance to the market. Agents of the company recently bought three memberships. Most of the actual buying will be done by Elmer Reed.

Frank C. Blodgett, manager of the Kansas City office of the Nye-Jenks Grain Company which recently took over the Barnes-Piazzek Company, is an applicant for membership in the Kansas City Board of Trade on transfer from George Vogt, formerly with the Barnes-Piazzek Company.

A Board of Trade committee headed by Fred Lake will meet with the directors of the Kansas City Grain Clearing Company soon to discuss the organization of a grain trade credit bureau. The St. Louis and Minneapolis plans have been talked over and it is thought one based on them will be adopted.

CINCINNATI

HARRY A. KENNY CORRESPONDENT

FROM all reports the grain and hay business in Greater Cincinnati during the past month, has been of a satisfactory nature, when present business conditions are taken into consideration. Grain dealers say that their business in February was slightly in excess to that in January. The movement of Winter wheat to this market, which started out on a rather large scale, the fore part of February, finished up rather light. Spot opinions on Red Winter are advancing from week to week. Dealers are almost unanimous in saying that what buying is going on now is of a hand-to-mouth nature.

Reports from hay dealers are to the effect that the movement of hay is being held up because of the poor conditions of the roads, but with the inauguration of good weather, they look for a decided improvement in conditions. Prices on hay have advanced to some extent during the past month, due to a shortage of certain grades in this market.

Feed and flour merchants report a fairly good business for this time of the year. Members of the trade here are of the opinion that with the opening of good weather there will develop a decided improvement in business.

Upon his return from Chicago where he attended a conference of railroad officials and traffic managers, B. J. Drummond, traffic manager of the Cincinnati Grain and Hay Exchange, announced that reductions amounting to from ½ a cent to 2½ cents per hundred on grain to Cincinnati and railroad crossings were obtained for local grain shippers. Mr. Drummond reported that some 90 points in the best wheat and grain producing districts of the Central States were affected by the reductions. Under the changes the maximum grain rate to Ohio River crossings from the Central States will be 21½ cents and the minimum 10½ cents. In the equalization process

there were 35 points in the district from which slight increases in rates were made, but these were points which were governed by the long and short haul clause, and almost all of them were points from which very little grain originates, many of them being in the coal regions of the Central States, Mr. Drummond said.

Lawrence Henry Hansberger, 62 years old, traveling representative of the Omaha Alfalfa Company of Omaha, Neb., died of acute digestion while in his room at the Emery Hotel last month. Mr. Hansberger stopped off in Cincinnati to call on some of his customers, while on his way from Louisville, Ky., to Huntington, W. Va., where he had purchased a new home.

Owing to the lease of the grain inspection department of the Cincinnati Grain and Hay Exchange located in the Gwynne Building expiring on April 1, the Exchange has instituted a search for one large or two small rooms, preferably located in the western section of the city, to house the inspection department. The quarters must have a northern exposure, owing to the United States Standards Act, which calls for all grain to be inspected under northern light, which is uniform and essential in determining the correct color of the grains. The Exchange has found no suitable space for the inspection department in the Chamber of Commerce to which it has recently returned. The West End is desired because the majority of grain shipments are received in the railroad yards in that part of the city.

W. A. Daniel & Co., stock and grain brokers on the second floor of the Ingalls Building opened their offices on March 6. The firm is composed of W. A. Daniel and Paul Van Leunen, while Bert Reynolds will also be a member of the force. Messrs. Van Leunen and Reynolds were connected with the local offices of Wagner & Co., while Mr. Daniel was formerly with the Mutual Commission Company.

The Perin Milling Company and the Brouse-Skidmore Grain Company, two of the oldest established firms in Cincinnati, have consolidated under the firm name of the Perin-Brouse-Skidmore Grain & Milling Company. The company which has been incorporated with a capital of \$125,000 will operate flour and grits mills, in addition to dealing in grain, feeds and hoy. The hay warehouse of the Brouse-Skidmore Grain Company will be continued at Sixth and Carr Streets, while the general offices of the consolidated company will be at 14 East Front Street, the former headquarters of the Perin Milling Company. Lyman Perin has been elected president of the new concern. Henry Brouse, vice-president and treasurer, and Earl F. Skidmore, secretary. Mr. Brouse has just completed his term as president of the Cincinnati Grain and Hay Exchange. The legal papers for the incorporation and merger were drafted and filed with the Secretary of the State of Ohio by Attorney Gerritt Fredricks.

The Nutritia Milling Company has changed its name to the Hawthorne Milling Company. The change was made because the concern is now in the hands of entirely new interests.

The Cincinnati Grain and Hay Exchange has for sale 15 grain tables of mission style with marble tops and will sell them at a sacrifice to move them quickly. The tables originally cost \$110 and are in excellent condition and were formerly used in the Gwynne Building before the Exchange returned to the Chamber of Commerce, where similar tables were available. Offers should be addressed to D. J. Schuh, executive secretary.

John De Molet, president of the Cincinnati Grain and Hay Exchange, has announced the appointment of the standing committees for 1922. The following are the chairmen of the various committees:

Arbitration, H. L. Early; Auction and Call, E. H. Heile; Entertainment, W. B. Riley; Executive, John De Molet, R. I. Fitzgerald, vice-chairman; Corn Discount, E. B. Terrill; Finance, F. L. Watkins; Grain Inspection, F. F. Collins; Hay Inspection, Sherman Boss; Oats Discounts, W. R. McQuillan; Rules, H. M. Brouse; Rye and Barley Discounts, Max Blumenthal; Traffic, F. L. Watkins; Yard Board of Governors, E. H. Heile; Weighing, A. M. Braun; Wheat Discounts, W. G. Stueve.

Whether the Cincinnati grain trade will follow the action of grain dealers of Chicago on the question of the consignees' responsibility under the uniform bill of lading which became effective March 15, will depend largely on a meeting to be held by the Board of Directors of the Cincinnati Grain and Hay Exchange in the very near future. At Chicago the grain trade notified the consigners that dealers would not accept cars or shipments where the consignor signed the bill of lading refusing further liability for freight charges. It is not known whether members of the grain trade here want to be quite so drastic, but President De Molet has called the meeting in order that discussion of the trade's attitude might be had. Some dealers say that notification to consignors is

necessary in order to protect the consignees from fly-by-night operators. It is said that it is impossible to refuse liability for charges and do business for often a carrier might present a bill for freight six months after a transaction had been closed. If the consignor has signed the bill of lading refusing to accept further liability all charges would fall on the commission merchant here and he would be wiped out in short order.

ST. LOUIS

S. F. LARRIMORE CORRESPONDENT

CONDITIONS in and near Missouri for corn, wheat and rye are reported by the Missouri co-operative crop reporting service as follows: "Winter wheat and rye, further deterioration of the wheat crop is reported in central and western counties of Kansas, due to the drought and strong winds. The condition of the crop is only fair in Nebraska and rain is needed in the southwestern districts of the state and in southern Iowa. The early sown crop in Oklahoma is fair, but much of the late crop has not yet sprouted or is showing a poor stand. Some winter killing is reported in the north-central states, except in the northern section, where the crop has been protected by snow. Missouri wheat condition varies from very good to very poor." In regards to corn, the report states that a considerable surplus still remains on the farm, marketing being very slow.

The Missouri Soft Wheat Millers Association is to hold its general meeting in St. Louis, April 18, at the Planters Hotel. The Missouri Grain Dealers Association will hold its eighth annual convention at the same place the following two days. The permanent organization of the Missouri Soft Wheat Millers Association has been completed.

Interest rates for all purchases and consignments of grain, seeds, etc., for the Merchants Exchange of St. Louis has been fixed at 6 per cent for the month.

Stocks of flour at St. Louis for March 1, 1922, were 65,000 barrels; February 1, 1922, 68,850 barrels; March 1, 1921, 68,331 barrels. Wheat stocks at St. Louis March 1, 1922, were: Public elevator, 1,318,006, private elevator, 130,120, total 1,448,126 bushels.

The Federal Barge Line received shipments from St. Louis for January of 185,000 bushels of corn.

Thomas W. Carter, president of the Carter Commission Company, 72 years of age, died at his home in St. Louis recently. Mr. Carter had been active in business in St. Louis for many years and is very well-known among the trade everywhere.

The following were visitors on the floor of the Merchants Exchange recently: J. W. Thompson, Thompson Milling Company, Madisonville, Ky.; Glen Johnston, of the W. B. Johnston Grain Company, Fairview, Okla.; Ben Head, of Smith & Head, flour and grain brokers of Atlanta, Ga., and E. A. Nelson and L. Lavery, of the Williamson Milling Company, Clay Center, Kan.

Following a conference between St. Louis dealers in farm products and Attorney General Barrett at Jefferson City recently, it has been announced that briefs will be filed by the St. Louis Chamber of Commerce and the St. Louis Merchants Exchange in an effort to clarify the meaning and operations of the Marketing Bureau Act. According to Edgar Gengenbach, assistant general secretary of the Chamber of Commerce, who attended the Jefferson City conference, all persons who have transactions in farm products may be required, under the Attorney General's interpretation of the Act, to obtain a license and file a \$5,000 bond, unless they pay cash for the goods at the point of origin.

The ultimate effect, Mr. Gengenbach believes, will be to destroy gradually or to limit existing markets for the farmer. The Act, Mr. Gengenbach contends, while presumably intended to provide a protection and relief from fraud and to protect farmers from unscrupulous commission merchants, in its exact wording has created a serious condition for farmers by taxing all market activities in an attempt to reach the relatively few cases of fraud.

The law, plainly dealing with commission merchants in its intent, has been so worded as to leave every avenue of doubt open as to what constitutes a transaction on a commission basis, distinct from all other purchase transactions in farm products, both state and interstate.

Callaway County, Mo., farmers sowed their wheat late last fall and the indications, states a recent newspaper article, are that the Hessian flies will not be as numerous as in former years. County Farm Agent C. E. Neff believes that the fly has passed the winter in volunteer wheat, because of the mildness

of the weather and that it will make its appearance in spring. In that event wheat would be in danger of being damaged to a certain extent. The chinch bug situation is hard to figure out, Mr. Neff stated, because they were numerous in many sections, yet inspections so far have indicated that there will not be so many this year. While, of course, the above report only covers Callaway County, it is presumed that it is fairly representative of that part of Missouri.

The members of the St. Louis Merchants Exchange, in a special election held recently, voted an appropriation of \$5,000 for the purpose of assisting the Grain Dealers National Association to carry on the work in the interest of the grain trade amongst the farmers and to combat adverse and radical legislation.

Announcement was made recently through the St. Louis press of the proposed organization at Cape Girardeau, and backed by St. Louis bankers, of a \$2,000,000 corporation to refinance and direct operation of extensive farming interests in southeast Missouri. The effect of the present business depression is responsible for the organization, which will be financed by St. Louis and southeast Missouri bankers and landowners.

Harry N. Meisemann, of the Missouri-Pacific Railroad Company, has made application for membership in the Merchants Exchange.

Geo. C. Martin, Jr., of Goffe & Carkener, Kansas City, recently sold his membership in the Kansas City Board of Trade and has come to St. Louis where he will be a partner with P. C. Knowlton, in the Martin-Knowlton Grain Company, with offices at 515 Merchants Exchange Building. This company will take over the business of the Goffe & Carkener Company, in St. Louis. Fred C. Hoose of the Norris Grain Company, Kansas City, is interested in the new firm, which will also represent the Norris Grain Company, in St. Louis.

A notice was recently posted on the bulletin board of the St. Louis Merchants Exchange to the effect that the Burlington Railroad is now refusing to protect erroneous rates from Missouri River crossings as announced in a circular dated February 24. The matter has been presented to the Interstate Commerce Commission for decision.

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

RECEIPTS of grain at the Milwaukee market are falling back a little according to the latest figures. The first week in March showed 797 car loads of grain against 990 car loads for the week before and 777 cars a year ago and 649 car loads for the corresponding week of 1920.

A week ago the receipts were 990 cars against 907 cars the previous week, 463 cars a year ago and 737 cars in 1920. These figures indicate that the offerings of grain by weeks have been 907 cars, 990 cars and 797 cars for the first week in March. Receipts which have been hovering between 900 and 1,000 cars weekly are now down to less than 800 cars.

For the first week of March the offerings were made up of 95 cars of barley, 488 cars of corn, 165 cars of oats, 10 cars of wheat, 38 cars of rye, 1 car of flax. These figures show that more than half of all the grain coming is corn, oats offerings are heavy and barley offerings are also quite large.

For the last week price movements in grain have been somewhat irregular, barley trade showing gains of 4 to 5 cents, corn going down 3 to 4 cents, rye went 2 cents lower and wheat is off 5 to 6 cents. Barley is therefore an exception showing advances, while the general grain market is going down. Grain men assert that some reaction was to be expected in prices after the striking gains recorded over a number of days of trading.

J. B. Oliver, aged 82, one of the oldest and best known of the grain men at Milwaukee at one time, is dead. Mr. Oliver was for a long time a member of the Chicago Board of Trade. He was buried at Milwaukee.

A brisk demand for oats for export has been reported at Milwaukee for several weeks. Oats is wanted for industries also, but the foreign demand has been especially good.

As the crop season goes on, more and more of the corn is being shipped to Milwaukee. According to the latest compilation Milwaukee has received more than 11,000,000 bushels of corn on this crop year as compared with a little more than 6,000,000 bushels for the corresponding time a year ago. Milwaukee ranks

fourth among the primary markets for corn receipts, indicating that other primary centers have likewise been getting more corn. Some Milwaukee grain men predict that this city may forge up to second or third place for corn receipts if the present active marketing tendency keeps up.

Rye has been in excellent demand at Milwaukee at a price above the \$1 mark. Liberal demand for export has had much to do with boosting of the price to the higher level. The trade reports at Milwaukee also indicate that the rye fields have been greatly damaged by the lack of snow and by the alternate thawing and freezing.

The Chamber of Commerce Board of Directors has gone on record in favor of the bonus tax provided the money can be raised without any serious damage to the business interests of the country. It was suggested by the Board that it might be well to raise bonus money by modification of the Eighteenth Amendment so that light wines and beer be legalized and that these be taxed sufficiently to provide necessary funds.

Among the recent visitors at the Milwaukee Chamber of Commerce have been C. Porter of Fox Lake, Wis.; E. G. Berry of Chicago; C. V. Fisher of Kansas City; J. C. Kieffer of Auburndale; H. G. Wierman of Waldo; and a number of others.

Grain in store at Milwaukee is at a higher point than for many months past. The holdings of wheat are reported at 112,000 bushels in round numbers; corn is 3,404,000 bushels approximately; oats is 1,316,000 bushels; barley 106,000 bushels and rye is 96,000 bushels. Rye, barley and wheat stores are comparatively slight, while the supply of corn is unusually large—in excess of 3,000,000 bushels. Oats stores are also larger than customary.

Herbert H. Ladish, formerly connected with the Ladish Milling Company, has started business as a jobber in grains and feed stuffs. His office is at 415 Brumder Building, Milwaukee.

The Association of Commerce, in describing the most striking things about Milwaukee's business, is broadcasting a statement that the cereal mills of the city can grind more than 30,000,000 bushels of grain annually.

W. A. Hottensen, grain dealer, J. L. Bowlus, manager of the Transportation Department, and H. H. Peterson, president of the Chamber of Commerce, represented the Milwaukee Chamber of Commerce at the annual meeting of the National Rivers and Harbors Congress and of the National Merchant Marine Association. Both of these meetings were held at Washington.

The outlook for heavy grain traffic on the Great Lakes is exceedingly bright for 1922. No less than four ships are loaded with grain now waiting for the opening of navigation. The Steamer G. N. Wilson has 240,091 bushels of corn, the steamer *Ishpeming* has 379,573 bushels of corn aboard, the steamer *Joseph W. Wood* has 350,100 bushels of corn and the steamer *Polynesia* has 200, 994 bushels of corn, making a total of more than 1,170,000 bushels of corn ready to float as soon as navigation permits.

During February there were 14 cargoes of grain loaded at Milwaukee of which 11 were unloaded at Ludington and three were loaded for storage purposes.

James P. Hessburg, who has been with the Armour Grain Company at Milwaukee, has become connected with the Froedtert Grain & Malting Company, as manager of a new consignment department.

A late compilation indicates that Milwaukee flour mills have a capacity of 2,000,000 barrels of flour per year.

Milwaukee stands third among the primary markets for large oats receipts. Receipts here on this crop season have been over 15,000,000 bushels as compared with a figure of 12,000,000 bushels for the corresponding time a year ago. The city is outranked by Chicago and Minneapolis for oats receipts and St. Louis is trailing Milwaukee rather closely, although St. Louis is in fourth place. The demands of shippers and cereal mills have had much to do with keeping the Milwaukee oats market at a high point.

The latest report of the Chicago, Milwaukee & St. Paul Road given here indicates that in 25 days, car loadings were 120,000 cars as compared with 97,000 car loads for the same 25 days a year ago. The traffic for the 25 days also exceeded the 108,000 car record established in January. Part of the advance in car load shipments was due to the increased movement of grains to the local market.

One of the prominent members of the Chamber of Commerce, George J. Zimmerman, president of the Milwaukee Malting & Grain Company, is dead. He had joined the Chamber in 1878, so that his membership

covered almost 44 years. For many years Mr. Zimmerman had been connected with the malting industry and he was reputed among the experts in that line of business. He was a member of the supervisors of grain inspection and weighing, one of the leading committees of the Chamber of Commerce.

* * *

Official reports from the Wisconsin crop bureau indicate a grave fear that wheat, rye, Clover and Alfalfa over the central part of the state have been seriously damaged under the icy sheets which formed from the storms late in February.

* * *

Milwaukee stocks of flour at the opening of the month were down to 13,000 barrels in round numbers, compared with 15,000 barrels a month ago, 22,000 barrels a year ago, 19,000 barrels two years ago, 14,000 barrels three years ago, 7,000 barrels four years ago and 8,000 barrels five years ago. The flour stocks are at the lowest point since 1918, four years ago, for the same season of the year.

* * *

Higher prices for grains at Milwaukee have caused an advance in the price of mill feeds of about \$5 to \$6 a ton. The demand was stimulated by the advance and feed dealers also stocked up to some extent with larger supplies. As the mills increased their grinding there was some increase in the offerings of mill feeds.

* * *

A striking tendency is manifest in the Milwaukee market to larger and larger car loads. According to the latest report wheat is now averaging 1,400 bushels to the car, a gain over the previous record of about 50 bushels.

The average amount of corn per car load is now 1,480 bushels, a gain of about 55 bushels over the previous report.

Car loads of oats now average approximately 2,030 bushels. This is less than the previous report of 2,115 bushels, the loss being about 85 bushels to the car. Oats is the one exception in being loaded more lightly.

Barley cars have been averaging 1,580 bushels, a gain of about 35 bushels over the previous report.

Car loads of rye have been averaging 1,415 bushels, a gain of about 25 bushels over the previous figure given.

Flax cars now average 1,430 bushels. This is also a gain of 50 bushels to the car. All grains except oats are therefore showing gains per car of 25 to 55 bushels. Oats is the one exception.

* * *

The outlook is bright that Milwaukee will get \$4,000,000 from the Federal Government to complete its big harbor program. Reports of Milwaukee representatives sent to Washington to work for the appropriation are that Congress is in a strong frame of mind to economize on rivers and harbors as on everything else, but that the \$4,000,000 for Milwaukee has been recommended and that it is likely that the money will be forthcoming.

The breakwater to protect the harbor is to be furnished by the Federal Government, according to present plans, while the millions needed for actual harbor work will come from the city. The Federal appropriation will assure the completion of the entire project, it is believed.

* * *

The Milwaukee Chamber of Commerce has filed a complaint with the Interstate Commerce Commission seeking lower rates on grain from southern Minnesota to Milwaukee. The carriers are allowed 20 days for an answer to the complaint and it is expected that very shortly a date will be set for the hearing concerning this matter.

* * *

Milwaukee shipping interests are still working night and day for the success of the St. Lawrence deep water way. Plans are now under way by the Association of Commerce to hold a convention in Milwaukee in June the prime purpose of which will be to weld together the interests who are backing the St. Lawrence water way and those who are promoting the Mississippi River water way.

This move, it is expected, will prevent the eastern opposition to the St. Lawrence route from combining with the Mississippi River route enthusiasts. It is planned to hold the St. Lawrence route workers in alliance with the Mississippi route workers so that the Middle West and South will be served as contrasted with the East.

The plan of allying the middle western interests for the new route was taken when the delegates of Wisconsin to the Rivers and Harbors Congress in Washington voted for the plan. They referred the matter to George H. Ballhorn, attorney for the Association of Commerce, to take the necessary steps to bring this co-ordination of interests about.

New York is trying to make the Mississippi route supporters believe that if the St. Lawrence route is put through, it will militate against and perhaps prevent the southern route enterprise from being carried out. Milwaukee will therefore head the movement to bring the South and the upper Middle West together on water ways work.

* * *

Clover is said to be in especial danger because of the late start made last year and thus it entered the winter in poor condition and possibly cannot survive the

strenuous conditions now. Grain crops, it is also believed, suffered heavily due to the ice sheets which prevent the plants from getting the necessary air. In the northern part of the state this danger was largely eliminated by a heavy fall of snow.

The Wisconsin sleet storm was the worst in the history of the state and it is feared that the damage to the crops will be larger than first estimated.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

BUSINESS with the local elevator and grain trade is about the same as it has been for the past two months. There is a little better demand for corn and oats, but wheat at present values is a little dangerous, and there doesn't appear to be much stocking or long time carrying indulged in. One of the larger elevators reports that it has about 350,000 bushels of grain on hand, of which 25 per cent is corn, 15 per cent wheat and 60 per cent oats. About one-half of the stock is on long storage, the rest moving in and out. Average handlings are better and elevators in some instances are operating about eight hours a day. Corn is dry and in excellent shape. It is reported that the South is not buying especially well, due to shortage of funds. Movement out in the state is better.

Due to bad roads and wet fields there has not been much movement from the farm, receipts of hay being especially light, running as low as a car or two a day, except on Mondays when there are eight to 10 cars in. Generally local business is slow. Mill feed has been in very good supply, in spite of relatively light operation of mills.

Local jobbers' quotations show bran at \$32 a ton; mixed feed, \$33; middlings, \$33; hominy feed, \$27, and cracked corn, \$28. No. 2 White corn is quoted at 63 cents; Yellow, 62 cents; Mixed, 61½ cents. No. 3 grades are quoted at 1 cent under No. 2. No. 3 White oats, the only grade quoted at this time, are quoted at 41 cents.

Hay prices are very firm the market having been steady, due partly to light receipts. Quotations show No. 1 Straight Timothy, \$21; No. 2, \$19.50; No. 1 Clover, \$22, No. 2, \$20; No. 1 Mixed, \$19.50, No. 2, \$18; straw, wheat and oat, \$13, rye straw, \$15.

It had been believed by the local trade that March business would be far more active as a result of stocks in hands of country dealers running low, but the movement as a whole has not been up to anticipation. The retailer is generally buying light and often, taking advantage of quick freight deliveries.

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There is not much demand in Kentucky for Spring rye for planting purposes, as most of the rye is fall planted. However, seed oats are beginning to move, some of the seed jobbers asking 60 cents a bushel for prime seed. Rye is quoted at \$1.25. Timothy seed is 7 to 8 cents a pound; Red Top, 25¢@26 cents; Alfalfa, 19 cents; Western millet, \$2.50 a bushel; Tennessee millet, \$2.75; Cane seed, \$2.75 a hundred; Red Clover, \$16.05 a bushel; Alsike, \$12.90 a bushel; Cow peas, \$2.25 to \$2.40 a bushel; Cow peas, \$2.10 @ \$2.40, according to kind and grade; Orchard grass, 20 cents a pound; Bluegrass, 18 pounds to the bushel, 50 cents a pound, 17-pound stock, 45 cents, 15-pound stock, 35 cents, 10-pound stock, 15 cents. The heavy seed weighing 19 to 21 pounds to a bushel is exhausted. Demand for Bluegrass seed this year has been so heavy that even the lightest seed has been cleaned out and marketed, including stock that in the old days was thrown away as worthless, but which has proven to have a very excellent germination test.

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Philip Clayton Diefenbach, New Albany, Ind., who, with his father, Philip Diefenbach, operate a grain and flour milling establishment, was recently married to Miss Florence Mildred Creamer, of the same city.

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Edinger & Co. report a better demand for feed, hay, grain, etc., from out in the state, but according to O. W. Edinger the local business is very quiet.

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The larger jobbers and brokers of grain since prohibition in many cases have found business very quiet, as some of them specialized in distillers' and brewers' supplies, and haven't found any business to replace it.

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Dewitt T. Davis, 25 years of age, grain dealer of Jeffersonton, Ky., was recently married to Miss Thelma Ernwine, 22, of 1635 South Preston Street, Louisville.

* * *

William E. Hess, operating a hay and feed store at 1234 West Broadway, Louisville, after nine robberies of his office in 11 years, the last in early February, has nine good reasons why he does not leave anything of value in his safe over night. The last

robbery netted the cracksmen only a few pennies, and such articles as fountain pens and junk. However, the safe was wrecked. A sign is now on the safe, reading "Please Don't Crack This Safe—It's Open." In fact it was unlocked when the last visit was paid, as a precaution against having it wrecked, but the thieves first broke it open.

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F. C. Dickson, manager of the Kentucky Public Elevator Company, in discussing the local grain situation, said that conditions locally had improved materially over the year as a result of many discriminations in freight rates, which applied against Louisville, having been ironed out. Through efforts of the grain men and traffic experts a number of irregularities in freight rates are being straightened out, and every two or three weeks some discrimination is being removed, which is resulting in Louisville again being able to move grain more freely to various points. Mr. Dickson explained that business was coming in spurts, but that the plant was handling considerably more grain, and operating far more steadily than last year, or the previous one.

* * *

As a general rule, in the old days, March and April were months that were feared by the elevator men, due to the fact that these were the germinating months for corn, which would heat badly. However today, with large drying equipment, there is no danger of heating, as the grain is rehandled through the driers whenever it shows the least sign of heating. In the old days at times it was necessary to run the machinery day and night in keeping the grain moving, and keeping it from overheating.

TOLEDO

C. O. BARNHOUSE - CORRESPONDENT

AT THIS writing there is a good demand for milling wheat from interior mills. Millers generally are also reporting an improvement in the demand for flour. A seasonal decline in the demand for mill feeds is noticeable.

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The Ohio Farmers Grain Dealers Association held its annual meeting at Findlay, February 22-23. The principal features of the meeting were addresses by President R. E. Croninger, L. J. Taber of the Ohio Board of Agriculture, O. E. Bradfute, of the Ohio Farm Bureau Federation, and Kent Keilholtz, president of the Toledo Produce Exchange. Officers were elected as follows: R. E. Croninger, Grand Rapids, president; D. J. Lloyd, Waterville, and Geo. Graham, Defiance, vice-presidents; W. F. Myers, Westerville, and Frank Randolph, Somerset, directors. Over 100 members were present and an interesting meeting was held. Kent Keilholtz, Fred Mayer, Will Cummings, Geo. Woodman and Carl Bryant were in attendance from Toledo.

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The investigation of the Ohio Utilities Commission into intra-state rates has been postponed from February 16 to March 23.

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Traffic Commissioner Macomber, of The Toledo Produce Exchange, recently spent a day in Cleveland, conferring with representatives of other Lake Erie ports on the matter of ex-lake grain rates. While there he attended the banquet of the Cleveland Traffic Club.

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Anderson, Brown & Co., a firm of stock brokers, of New York, with a branch in the Boody House here, closed up February 20, a petition in involuntary bankruptcy having been filed against them by creditors in New York. Leonard Ullrich was manager of the branch here, which was established about a year ago.

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L. A. Mennel recently returned from a two weeks' visit to his father at St. Petersburg, Fla.

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J. D. Hulburt, secretary-treasurer of The Toledo Grain & Milling Company, returned to his duties last week after being absent about two weeks on account of illness.

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A. A. Kemper, president of the G. E. Conkey Company, of Cleveland, spent several days recently on the Toledo Produce Exchange trading floor.

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H. W. Applegate, buyer for the Mennel Milling Company, passed the smokes about the first of the month in celebration of the arrival of a son.

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C. C. Lewis, of the Lewis Grain Corporation, Buffalo, spent a day on Exchange not long ago.

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J. E. Churchill, grain dealer of Rushville, Ind., spent a day on the Exchange recently. S. G. Courteen, of the Courteen Seed Company, Milwaukee, Wis., Wm. Noble, of Noble Brothers, Gibson, Ill., and Albert Colton, of The Colton Brothers Company, Belle-

fontaine, Ohio, were among last week's visitors. Among other recent visitors were: Eli Short, of Stryker; John Dirk, of Weston; Eli Dickey, of Jewell; E. H. Baker, of Whiteville; R. E. Croninger, of Grand Rapids, and D. J. Lloyd, of Waterville.

K. D. Keilholtz, J. C. Husted and Henry Raddatz made a business trip to Chicago recently.

The Northwestern Ohio Farmers Grain Dealers Association held their monthly meeting at Jewell, on March 6. President Keilholtz of the Produce Exchange was present and addressed the meeting.

The statement of the Willshire Equity Exchange, of Willshire, Ohio, shows that they made a profit of \$5,000 during the last six months, according to Carl Bryant of W. H. Morehouse & Co. Paul Dudgeon is the manager and deserves to be complimented for such successful results.

David Anderson, president of The National Milling Company, returned Saturday from a several weeks' sojourn in Florida. He possesses a generous coat of tropical tan and an abundance of up-to-date fish stories to prove that he was there.

Raymond P. Lipe traveled to New York City last week, expecting to be gone several days.

MINNEAPOLIS

H. A. PAUL CORRESPONDENT

FOR the first time since 1916 the official Chicago market wires between that market and the local Chamber of Commerce were down during the terrific snow and sleet storm of recent date. Flour mills were forced to shut down as it was impossible to move cars. Trading on the local floor was done with difficulty as no outside information sifted through the maze of broken wires.

The Barnett & Record Company of Minneapolis has been awarded the contract for the construction of a 1,500,000-bushel storage annex to the Port Arthur plant of the James Richardson & Son. F. R. McQueen, president of the company, announced that the work will be handled from the Port Arthur office of the construction company and will commence early this spring.

Limitation of crops is the best method for farmers to better their economic condition, Henry N. Owen, manager of the *Farm, Stock and Home*, declared in an address recently in Minneapolis. Low prices on farm products can be attributed directly to over-production, he said, as farmers have gone ahead and produced without consideration of the consuming power of the market with the result that at harvest time they must take what they can get.

"Factories limit their production according to the market," Mr. Owen said, "and a retailer does not buy for a greater number of people than he can possibly serve. No more coal is mined than can be burned. Farmers are not required to produce food at a loss. Unless agriculture is placed on a satisfactory basis the farmers will be reduced to the class of European peasants who farm only for a home and a bare existence."

The Fegles Construction Company, of Minneapolis, has two large elevators under contract. These include the erection of a \$2,000,000 elevator for the State of New York and completion of the \$2,000,000 elevator at Grand Forks for the State of North Dakota. The former elevator is expected to be completed July 1 and work will be started on the Grand Forks Elevator, March 15.

I. W. Pregar, representing the Dutch importing house of Cardozo & Boekman, Amsterdam and Hamburg, was in Minneapolis recently to obtain flour importing contracts from a number of small Minneapolis flour mills. American flour is very popular in Europe to those who can afford it, he said.

Ralph B. Hartsough of Minneapolis recently was awarded more than \$250,000 in back royalties and interest on the Happy Farming tractor, which he designed, in a suit against Albert Hirschheimer and others of La Crosse, Wis. The suit was carried to the Circuit Court of Appeals for the Seventh District at Chicago and was recently decided there in favor of Mr. Hartsough. The tractor was designed by Mr. Hartsough and made in small numbers in Minneapolis prior to 1915. In that year he entered into an agreement with Mr. Hirschheimer whereby the latter obtained a manufacturing privilege on the basis of 3 per cent to Mr. Hartsough on the retail selling price of each machine.

Late in 1916 Mr. Hartsough was induced to cancel his contract, following which Hirschheimer reorgan-

ized his company and resumed manufacture of the machines under the name of the La Crosse Tractor Company. Many thousands of machines were sold of the original Hartsough design, it is claimed.

Mr. Hartsough brought suit and the case was first tried in Wisconsin when it was ordered that the contract be restored and the cancellation agreement be set aside. This decree was reaffirmed by the Court of Appeals with modification which will enable Mr. Hartsough to collect nearly \$300,000.

An option on a 3,000,000-bushel capacity elevator at Buffalo, N. Y., has been taken by the Pillsbury Flour Mills Company of Minneapolis. Discrimination against Minneapolis in freight rates and because wheat can be shipped cheaper than flour led to the local concern seeking the option as they plan to construct a flour mill on the property, according to A. C. Loring, president of the company.

NEWS FROM NORTHERN OHIO

BY T. J. CUNNINGHAM

A. A. Cunningham, president of The Sneath-Cunningham Company, Tiffin, who recently underwent an operation, has recovered nicely and is able to be about again, but is not taking any active part in business as yet.

A report has been circulated that most of the Hancock County co-operative elevators got out with a margin of profit last year, but it is said that few dividends were in evidence. The Mt. Blanchard Elevator is reported as having made between \$1,200 and \$1,300, the Arcadia Elevator appears to have cancelled indebtedness of about \$1,000, Arlington Elevator shows a profit, and Jenera made enough to declare a dividend.

State Agricultural Statistician C. J. West reports growing wheat in Ohio has been damaged about 10 per cent from winter killing. The late sown wheat appears to have suffered the most damage, while a fair covering of snow has protected the plant in the northern part of the state.

At the Farmers-Merchants' Institute, which opened at Findlay, February 15, more than 8,000 ears of corn were displayed.

The Miami and Erie Canal project has aroused the interest of business men in several Ohio cities, and they are raising funds to further the plan. Former Mayor George N. Leasire, of Delphos, announced his intention of placing several boats on the canal if the plan goes through. He says he can deliver raw products \$2 on the ton cheaper than by railroads.

The farmers in Erie County are said to be taking unusual care in the selection of seed for planting, since tests made at Columbus, during Farmers' Week, showed that approximately 50 per cent of the seed corn tested was affected by root rot.

According to W. D. McKinney, secretary of the Southern Ohio Coal Exchange, an economic disaster, if not the elimination of the southern Ohio coal field, would result if the wage scale and working conditions proposed at the miners' convention, at Indianapolis, were adopted.

Freedom Township Elevator Company, Lucky, Ohio, has elected Paul Bruning, manager, and Edward Sandwisch, Fred Stein and Clarence Weigman, directors.

The Farmers Exchange Elevator Company, Tiffin, at its second annual meeting, February 21, declared a 6 per cent dividend, amounting to \$1,984. Frank S. Arbogast, secretary, announced that the company is in a prosperous condition.

Navigation was opened between Sandusky and Lake Erie Island ports on February 23.

Last month there was a meeting of superintendents, representatives of the claim departments and agents of the railroads entering Postoria at the Chamber of Commerce there. With them were representatives of the local mills and elevators, and the object of the meeting was to devise a method of salvaging the lumber used in making grain doors and getting better inspection of grain cars.

Farmers in the vicinity of Ottawa, Ohio, report that the wheat has come through the winter practically uninjured, and with a good spring, a bumper crop will be harvested. Some farmers have begun their spring plowing, and with continued moderate weather, oats sowing will soon be the order.

On March 10 the schools at Arcadia, Ohio, put on a corn show.

J. S. Coffey, department of animal husbandry at Ohio State University, in a statement March 7, says: "Ohio hog feeders cannot long enjoy the wide margin between the price of hogs and the price of corn. Hogs have passed the \$11 mark, and while corn is on the upgrade, there still is a wide margin between

the two. The reason for the closing in of this margin, is that a good many more sows are being kept this year than previous years, due to the fact that many farmers who lost money feeding cattle the last two or three years, are taking up swine production, because it is more quickly established, requires less capital, enables them to realize more quickly on their investment, and because corn is cheap. This may not mean an over-production of pork, but it does mean that the price of corn will advance, because the prices now received for hogs cannot come down as long as cattle and lambs are as high proportionately."

Otto Lindeman is now secretary of the East Clinton Lumber & Coal Company, Port Clinton, Ohio.

The Board of Directors of the Wharton Farmers Grain Company, Wharton, Ohio, have asked for sealed bids, up until 6 o'clock p. m., March 18, for the position of manager of the company, for the year beginning in April.

The Farmers Elevator & Exchange Company, Tiffin, are about to invade the oil and gasoline industry. They will erect a modern filling and oil station, similar to those operated by oil companies here, at which oil and gasoline is to be sold to farmers belonging to the elevator company at a price slightly above cost. Supplies will be sold to non-members at standard prices. All kinds of engine oil and grease will also be handled. Work of cutting out a sub-grade was begun March 10.

The havoc wrought by the past winter on pikes all over the country, has induced officials in various sections to make drastic rulings with regard to loads carried by trucks. In Seneca County, the maximum has been reduced to 6½ tons, including weight of truck. On March 10, Fred Adams & Sons Company, Toledo, flour and feed dealers, had one of their trucks held up on the Dixie Highway by the state police and the driver fined \$20 and costs by Monroe County authorities. The Michigan state law provides for a maximum load, including truck, of 15 tons on state highways; but the Monroe County commissioners amended this law to read that all trucks should carry only half the legal load during soft weather. The Adams truck carried four tons of flour and the truck weighed five tons. The fine was paid by the dealer to whom the flour was consigned.

The week ending March 11 has been ideal for the wheat in the ground. Bright, sunny days alternated with heavy, warm rains and occasional raw winds have been the order. The fields and roads, in the early part of the week, were soaked with water, but continued sunshine and winds have absorbed considerable of this. There is still an excess of moisture in the ground, however. Wheat which had a brown, dead look last week, is now turning green again. In several trips, covering this territory pretty thoroughly, no bad reports from farmers were received, and the wheat appeared to be in a very healthy condition. Farmers all seemed to have in mind, however, that this is the dangerous month, and were not allowing themselves to be lulled into a feeling of security by present appearances.

All roads are in a very bad condition at the moment—the mud roads being almost impassable. It is doubtful if farmers located on mud roads would be able to move anything, even though disposed to sell at present prices, owing to the condition of the roads.

Farmers who were inclined to sell corn a week or two back, are now disposed to gamble with what they have left—all feeling sure that corn will sell very much higher. This is especially true of farmers having corn of good quality and free from worm-eaten ears.

GRAIN NEWS FROM BOSTON

BY L. C. BREED

There are steamers chartered to load grain here for the Greek Government and one of the number recently received its cargo.

Restoration of the White Star Line service between Boston, Queenstown and Liverpool, which was suspended on account of the war, has been decided upon. This will constitute a notable addition to this port's over-seas lines for freight and passenger accommodations.

Information has been received at the Chamber's maritime department, that certain New York State interests are endeavoring to operate through the N. Y. State Canal, thence down the Hudson River to Long Island Sound ports and through the Cape Cod Canal to Boston and other eastern cities. A water barge service from the Lakes is embodied in a bill which has been presented in the Massachusetts State Legislature that provides for the erection of terminals for barges of the type intended to be operated.

A committee from the Grain Board composed of Charles M. Cox, Herbert L. Hammond, Leroy E. Cutting and Walter E. Smith were present recently at the

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hearing given at the State House on House Bill 108, relative to the registration and sale of commercial feeding stuffs, which proposed a tonnage tax of five cents a ton on sales in Massachusetts. The bill in question was originated by the Massachusetts Agricultural Experiment Station. The committee opposed this bill and the Director of the Station stated that he would present a substitute Bill making a registration tax instead of a tonnage tax. The Legislative Committee has as yet made no recommendation.

Thomas F. Emery of Charlestown, died suddenly, recently. He was for more than 40 years in the flour business, and for much of that time, the official inspector for the Chamber of Commerce. During the war he was allied with the Hoover Commission which examined all of the flour bound for France and other European countries passing through this port. He was 65 years old.

Formal complaint against 67 railroads and other public carriers, has been filed with the Interstate Commerce Commission by the attorneys for the Boston Chamber of Commerce in conjunction with other organizations in this section of the country. The plaintiffs allege that differential freight rates granted by these carriers menace the port business of New England ports and ask relief. The ports in question, it is claimed, are in competition with other ports, particularly Philadelphia and Baltimore, and there having been no formal review of the rate structure during the past 10 years, an appeal is made for an investigation of the conditions.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for February:

BALTIMORE—Reported by Jos. B. Hessong, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	814,531	739,799	1,565,204	1,030,551
Corn, bus...	9,382,775	3,143,280	6,274,704	1,851,048
Oats, bus...	102,223	129,004	14	48,862
Barley, bus...	3,082	214,270	166,485	152,500
Rye, bus...	536,176	1,702,030	909,443	1,448,581
Malt, bus...	2,225	3,208		
Straw, tons...	46	96		
Hay, tons...	1,078	1,495		
Milled, tons...	1,528	1,407		

CAIRO—Reported by John Thistlewood, secretary of the Board of Trade:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	15,416.50	92,920	9,207.30	164,598.10
Corn, bus...	1,075,711.38	153,201	1,190,606.10	185,055.10
Oats, bus...	1,055,333.3	1,137,111	786,065.16	1,238,470
Kaffir Corn, lbs...	19,550	19,550		

CHICAGO—Reported by John R. Mauff, secretary of the Board of Trade:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	1,393,000	1,134,000	918,000	1,192,000
Corn, bus...	31,109,000	13,657,000	19,329,000	5,166,000
Oats, bus...	6,848,000	3,874,000	4,457,000	3,304,000
Barley, bus...	905,000	483,000	167,000	465,000
Rye, bus...	225,000	367,000	105,000	234,000
Timothy Seed, lbs...	2,899,000	2,076,000	4,108,000	2,978,000
Clover Seed, lbs...	3,674,000	2,165,000	2,164,000	1,974,000
Other Grass Seed, lbs...	2,836,000	1,546,000	1,698,000	2,187,000
Flax Seed, bus...	96,000	17,000	1,000	3,000
Hay, tons...	11,153	10,723	992	1,645
Flour, bbls...	882,000	796,000	716,000	587,000

CINCINNATI—Reported by B. F. Drummond, executive secretary of the Grain & Hay Exchange:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	236,400	109,200	207,600	117,600
Shelled Corn, bus...	514,800	337,200	220,800	214,800
Oats, bus...	250,000	278,000	214,000	330,000
Barley, bus...	2,600	5,200		
Ear Corn, bus...	28,000	19,200		
Feed, tons...	2,490	1,560		
Hay, tons...	7,029	9,823		

DULUTH—Reported by C. F. MacDonald, secretary of the Board of Trade:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	594,342	1,367,331	78,129	983,510
Bonded Wheat, bus...	17,452	38,645		231,958
Oats, bus...	1,566,834	267,431	58	10,772
Barley, bus...	196,226	975,927	9,800	4,087
Bonded Barley, bus...	1,631	1,946	1,666	38,073
Rye, bus...	470,482	304,502	2,896	201,547
Flax Seed, bus...	72,197	107,251	79,261	22,955

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	4,163,133	4,519,862	3,699,722	3,039,918
Corn, bus...	7,668	4,473	5,206	5,601
Oats, bus...	1,917,947	3,151,051	2,097,766	451,945
Barley, bus...	417,794	662,091	379,895	154,178
Rye, bus...	118,512	94,065	13,574	132,773
Flax Seed, bus...	63,071	335,594	12,547	27,645
Mixed Grain, lbs...	1,196,940	1,876,655	622,270	213,880

GALVESTON—Reported by R. T. Miles, chief inspector of the Cotton Exchange & Board of Trade:

	Shipments	
	1922	1921
Wheat, cars...	512	3,562
Corn, cars...	20	7
Oats, cars...	12	2
Barley, cars...		86

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	213,200	182,000	33,800	52,000
Corn, bus...	3,379,500	1,384,500	1,136,500	1,169,000
Oats, bus...	1,032,000	684,000	674,000	796,000
Rye, bus...	8,400	12,600		12,600
Hay, cars...	16			

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	7,638,300	6,556,950	4,596,750	5,354,100
Corn, bus...	2,293,750	1,630,000	778,750	416,250
Oats, bus...	763,300	428,400	346,500	504,000
Barley, bus...	114,000	117,000	63,500	75,400
Rye, bus...	23,100	30,800	28,900	23,500
Bran, tons...	1,800	2,240	15,360	12,980
Flax Seed, bus...	1,000			
Kaffir Corn, bus...	536,800	463,100	352,000	211,000
Hay, tons...	28,928	45,384	8,580	24,564
Flour, bbls...	95,550	48,100	427,375	250,250

LOS ANGELES—Reported by M. D. Thiebaud, secretary of the Los Angeles Grain Exchange:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, carloads...	326	185		
Corn, carloads...	177	53		
Oats, carloads...	20	20		
Barley, carloads...	139	113		
Milo Maize, carloads...	135	87		
Kaffir Corn, carloads...	45	17		

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	112,000	248,400	125,725	142,075
Corn, bus...	3,406,920	1,471,020	1,398,898	1,541,725
Oats, bus...	2,011,465	539,440	1,066,040	470,300
Barley, bus...	529,280	497,490	272,665	143,630
Rye, bus...	303,160	150,120	173,630	145,410
Timothy Seed, lbs...	831,402	210,000	266,527	299,081
Clover Seed, lbs...	380,188	70,480	1,760,917	740,069
Malt, bus...	24,700	39,058	334,859	433,332
Flax Seed, bus...	15,730	69,340	13,769	
Feed, tons...	1,410	1,260	24,732	15,324
Hay, tons...	1,692	996	708	168
Flour, bbls...	103,980	125,870	65,530	123,130

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	7,072,000	7,371,960	2,038,920	3,270,400
Corn, bus...	2,571,330	1,099,810	1,005,030	951,180
Oats, bus...	2,081,430	1,252,090	1,817,330	1,110,920
Barley, bus...	739,410	739,410	739,410	787,270
Rye, bus...	275,910	359,010	324,020	289,330
Flax Seed, bus...	201,200	262,050	114,100	37,050
Hay, tons...	2,355	2,029	234	175
Flour, bbls...	109,433	94,679	1,279,145	1,218,503

MONTREAL—Reported by Geo. Hadrill, secretary of the Board of Trade:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	892,589	928,743		
Corn, bus...	2,606	4,947		
Oats, bus...	145,994	175,490		
Barley, bus...	46,016	144,572		
Flax Seed, bus...	14,103	2,008		
Hay, bales...	83,090	24,599		
Flour, sacks...	45,059	66,539		

NEW ORLEANS—Reported by G. S. Colby, chief grain inspector and weighmaster of the Board of Trade, Ltd.:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...			937,343	4,974,017
Corn, bus...			4,648,694	1,735,750
Oats, bus...			27,820	24,775
Barley, bus...			71,383	468,723
Rye, bus...			17,142	87,857

NEW YORK—Reported by H. Heinzer, statistician of the Produce Exchange:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	3,750,500	1,982,700	2,954,000	2,975,000
Corn, bus...	4,408,800	1,252,700	2,782,000	1,085,000
Oats, bus...	1,334,000	543,000	640,000	70,000
Barley, bus...	3,800,000	487,600	149,000	277,000
Rye, bus...	268,800	245,600	105,000	606,000
Timothy Seed, lbs...			2,108	
Clover Seed, lbs...				
Other Grass Seed, bags...	3,031			4,152
Hay, tons...	7,629	250	250	bales
Flour, bbls...	914,518	694,016	904,000	425,000

OMAHA—Reported by F. P. Manchester, secretary of the Grain Exchange:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	1,863,400	999,600	1,342,600	981,600
Corn, bus...	3,026,800	2,329,600	2,279,200	1,481,200
Oats, bus...	738,000	420,000	732,000	610,000
Barley, bus...	98,000	61,200	75,200	70,200
Rye, bus...	148,400	49,500	72,800	50,600

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	144,250	75,800	126,000	78,000
Corn, bus...	3,717,100	1,484,450	3,182,750	1,169,050
Oats, bus...	1,073,600	599,000	1,049,400	587,900
Barley, bus...	35,000	91,000	22,400	64,400
Rye, bus...	4,800	21,600	12,000	21,600
Mill Feed, tons...	15,950	7,320	17,861	9,230
Hay, tons...	850	840	490	400
Flour, bbls...	269,700	236,800	254,140	219,200

PHILADELPHIA—Reported by Samuel S. Daniels, secretary of the Commercial Exchange:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus...	3,168,908	833,603	2,697,964	956,486
Corn, bus...	2,419,427	1,601,225	1,881,030	903,439
Oats, bus...	150,135	122,028		
Barley, bus...	1,496			9,990
Rye, bus...	97,333	107,836	88,000	51,476
Flour, bbls...	230,677	194,598	39,385	50,038

PORTLAND, MAINE—Reported by Geo. F. Feeney, traffic manager of the Chamber of Commerce:

	Receipts		Shipments	
	1922	1921	1922	1921
Wheat, bus. . .	2,576,490	2,429,823	3,192,906	2,538,825
Corn, bus. . .	272,586	101,534	287,143
Oats, bus. . .	235,605	182,786	293,020	223,835
Barley, bus. .	336,741	170,183	306,290	218,251
Rye, bus.	66,961

ASSOCIATIONS

CONVENTION CALENDAR

March 14-16. National Scale Men's Association, Auditorium Hotel, Chicago.
March 21. Annual Convention, U. S. G. G., Inc., Chicago.
April 11-12. Western Grain Dealers Association, Hotel Fort Des Moines, Des Moines, Iowa.
April 19-20. Missouri Grain Dealers Association, Planters Hotel, St. Louis.
May 9-10. Illinois Grain Dealers Association, Peoria.
May 16-18. Kansas Grain Dealers Association, Wichita.
May 19-20. Oklahoma Grain Dealers Association, Oklahoma City.
June. Tri-State Country Grain Shippers Association, Minneapolis, Minn.
June 19-20. Wholesale Grass Seed Dealers Association, Hotel La Salle, Chicago.
July 25-27. National Hay Association, Hotel Breakers, Cedar Point, Ohio.

MISSOURI DEALERS TO MEET

The annual meeting of the Missouri Grain Dealers Association will be held in St. Louis on April 19 and 20 with headquarters at the Planters Hotel. The program for the meeting is not yet completed, but Secretary Boyer is on the job and will have something that no Missouri grain dealer will want to miss.

HAY ASSOCIATION AT CEDAR POINT

The Executive Committee of the National Hay Association has selected Cedar Point, Ohio, as the meeting place of the next annual convention of the Association which will be held July 25-27. The Hay Association has met several times at Cedar Point and the hospitality of the Hotel Breakers has been well tested and found ample in every case. The resort offers fine recreation, in addition to its facilities for the convention sessions, and you may be sure that President Biles and Secretary Taylor will have something worth while on every page of the program.

KANSAS MEETING DATE CHANGED

In order not to conflict with the Oklahoma Grain Dealers Association meeting the date for the annual convention of the Kansas Grain Dealers Association has been set ahead one day and will be held on May 16 to 18 at Wichita. The Wichita Board of Trade is making elaborate preparations for the entertainment of its guests, and Kansas dealers will know that the Wichita market is on the grain map.

Secretary Smiley invites suggestions for subjects for discussion. One has already been selected, "Government Discounts Between Grades," and fireworks are promised when the shippers clash with the exporters.

EASTERN FEED MERCHANTS MEET

On February 14 and 15 the Eastern Federation of Feed Merchants held the most interesting meeting in its history at Binghamton, N. Y. About 240 were present and many important steps were taken by the organization.

The Federation adopted the National Trade Rules for feedingsuffs promulgated and adopted by the feed manufacturers, the Millers National Federation, and the Grain Dealers National Association. The organization also affiliated with the Grain Dealers National Association, and adopted the county unit system of organizing.

Professor I. G. Davis of the Connecticut College of Agriculture at Storrs, gave an interesting report of a survey made to determine the cost of feed distribution in that state. He stated that practically all the feed used was for dairying and poultry, and that out of \$15,000,000 worth used, about \$1,200,000 or 8 per cent was handled by Co-operatives. He emphasized the fact that feed dealers and farmers were so closely associated that if the latter found poultry and dairying unprofitable he would go out of business and the feed dealer would go with him. He also brought out that improved marketing methods in the West and Middle West had brought products from those sections into sharp competition with local products. He explained that the growth of co-operation was due to a condition, illustrated in one county, where dealers within a radius of 20 miles had prices on bran that varied \$13 to the ton. The

things that are needed most in the feed business, Mr. Davis said, were a uniform accounting system with means of frequent checking; educational work with farmers; more efficiency in operation; stop boycotting manufacturers that sell to co-operatives; reduce production costs on the farm.

Paul Mehl, extension agent in marketing at Storrs College gave an address on "What Are Our Costs of Doing Business?" And addresses were made by Charles Cowles of Plantsville, Conn., and Alfrete T. Halley of Hackensack. We regret that lack of space necessitates omission of these addresses. The paper of Sherman T. Edwards is given elsewhere in this issue.

AMERICAN WHEAT GROWERS TO ORGANIZE

A federation of all the state wheat growers co-operative societies was planned at a meeting of representatives held at Denver on March 3. An Organizing Committee, consisting of George C. Jewett, general manager of the Northwest Wheat Growers, Associated, Portland, Ore.; W. C. Landon, of the Kansas Wheat Marketing Association; and G. C. Murley, president of the Oklahoma Wheat Growers Association.

A resolution calling upon all organizations to put away sectional differences and private pooling plans in favor of a 100 per cent national wheat pool was signed by: J. L. Hull, director of the Nebraska Wheat Growers Association; A. B. Parish, president of the Colorado Wheat Growers Association; J. D. Murley, president of the Oklahoma Wheat Growers Association; W. F. Michael, president of the Kansas Wheat Growers Association, and G. D. Hyde, J. D. Pancake, William G. Eckhardt, and V. H. Smith, directors of the United States Grain Growers, Inc.

OHIO FARMERS DEALERS MEET

At its seventh annual convention, the Ohio Farmers and Grain Dealers Association which met in Findlay, February 22, re-elected R. E. Cronninger, Grand Rapids, president, and named D. J. Lloyd, Waterville, first vice-president, and G. W. Graham, Defiance, second vice-president; H. M. Eisman, Deshler, W. F. Meyers, Westerville, and Frank Randolph, Somerset, were named Directors. In the course of his remarks, President Cronninger said that Ohio farmers' co-operative elevators are coming through the period of depression in a satisfactory manner, and that improved agricultural conditions are already seen. Farmers' elevators to the number of 100 and over were represented.

At the banquet in the evening, Kenton D. Keilholtz, president of Toledo Produce Exchange, urged a campaign for greater use of flour made from Ohio wheat. At the closing sessions, February 23, resolutions endorsing the proposed St. Lawrence-to-the-lake waterway were adopted. It was also resolved that Congress should give "favorable consideration of the proposition of Henry Ford on the Muscle Shoals project." An immediate reduction in present freight and passenger rates, which were termed exorbitant, was demanded. Sympathy with the United States Grain Growers, Inc., was expressed.

MINNESOTA FARMERS DEALERS MEET

The annual convention of the Minnesota Farmers Grain Dealers Association was held at Minneapolis, February 21-23.

The principal speakers and their subjects were as follows: C. T. Jaffray, ex-member of the Federal Advisory Council, Minneapolis—"How Can We Finance Our Farmers' Elevators"; M. R. Meyers, Chicago—"Co-operation"; E. C. Stackman, Plant Pathologist of the University Farm School—"Black Stem Rust and Its Causes"; and G. G. Glick, field secretary of the Great Lakes-St. Lawrence Tidewater Association—"The Empire to the Sea."

Mr. Jaffray's talk, in addition to discussing the immediate subject, was a general review of business conditions and an explanation of the method by which the War Finance Corporation loaned money for agricultural relief.

Mr. Stackman, a rapid fire and very interesting speaker, devoted a short time to the question of black-stem rust, its causes and results. His indictment of the common barberry was a very severe one.

Mr. Glick, representing the Great Lakes-St. Lawrence Tidewater Association, discussed the many advantages which would accrue to the grain grower of the Northwest through the completion of this project.

A "get-together" banquet for visiting delegates

and their friends was held at the West Hotel on Tuesday evening, M. R. Myers of Chicago, presiding.

John Gustafson of Windom was elected president of the Association at the close of the convention, defeating Charles Kenning of Bird Island, who was proposed for re-election. Other officers include: B. N. Anderson, Hartland, vice-president; Adam Brinn, Stewartville, treasurer; A. F. Nelson, Benson, secretary; Messrs. Gustafson, Brinn and S. S. Beech of Hutchinson, Minn., were elected members of the Board of Directors for three years. Fred Seidensticker of Wheaton was elected to serve out the unexpired term of the late H. R. Meisch of Argyle.

President Gustafson, appointed a Legislative Committee composed of B. N. Anderson, Hartland, and Theodore Frederickson, Kerkhoven.

Mr. Nelson's report showed 143 members in good standing in the Association. The membership campaign will seek to swell this number to 350 by 1923. The organization was founded 15 years ago and A. O. Lunder of Slayton, member of the original Board of Directors is still serving on the Board.

NORTH DAKOTA WHEAT GROWERS ORGANIZE

The North Dakota Wheat Growers Association held its first meeting for the purpose of adopting by-laws and making plans for future organization work at their general office at Grand Forks, N. D., on February 20.

The Association was granted a charter of incorporation January 23, 1922. The necessary by-laws were adopted. The following is the first Board of Directors: S. H. Copenhaver, Carrington; M. S. Blair, Grand Forks; Francis M. Copeland, Parshall; T. B. Thompson, Thompson; A. G. Peterson, Grand Forks; H. L. Knauss, Tolna; A. Meecham, Edinburg; George E. Duis, Grand Forks; A. O. Omlid, Thompson; A. N. Winge, Van Hook; Howard Bird, Flaxton; O. G. Bothen, Aneta; O. K. Melby, Manfred; Will G. Williamson, Arvilla; John Mahon, Langdon; A. R. Josund, Cathay; T. H. Maloney, Webster; A. P. Minette, Webster; A. J. McDonell, Devils Lake, and S. J. Moulton, Wahpeton.

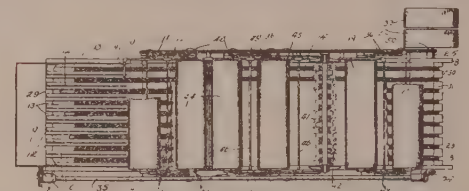
The officers elected were as follows: George E. Duis, Grand Forks, president; A. R. Josund, Cathay, vice-president; A. J. Scott, Grand Forks, secretary; Nick Nelson, Emerald, treasurer. The Executive Committee chosen was A. N. Winge, Van Hook; A. Meecham, Edinburg, O. G. Bothen, Aneta, and M. S. Blair, Grand Forks.

GRAIN TRADE PATENTS

Bearing Date of November 22, 1921

Corn cleaning and sorting machine.—Andrew Sternad, Chicago, Ill. Filed October 24, 1919. Renewed August 18, 1921. No. 1,399,412. See cut.

Claim: In combination, a plurality of rollers adapted to having spaces therebetween permitting the passage

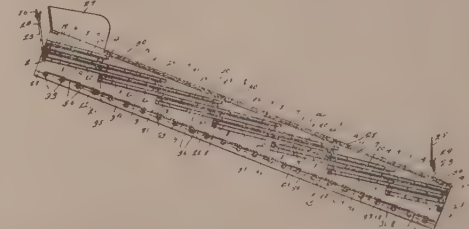


of small ears of corn and foreign material between the rollers and hold larger ears of corn on the rollers; and means for washing said larger ears of corn on said rollers.

Bearing Date of November 29, 1921

Grain cleaner, separator and drier.—Willard A. Petteys, Wilcox, Neb. Filed June 4, 1918. No. 1,398,275. See cut.

Claim: In a grain separating structure comprising a trough shaped rectangular chute, upper and lower spaced series of screening members, each of said screening members having upper and lower parallel inclined guides secured to the inner sides of the chute,



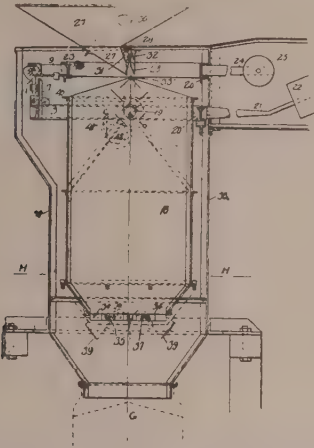
screening frames of different mesh supported by the said guides, an upper and lower independent series of hinged shutters constituting a flooring for the chute and baffle plates for the upper and lower series of screening members, and independent means to selectively open either series of shutters to regulate the air draft within the chute.

Weighing scale.—Rodolphe Wolter, Buenos Aires, Argentina. Filed January 20, 1920. No. 1,398,480. See cut.

Claim: A weighing apparatus, comprising, in combination, a balancing beam, a receptacle movable ver-

March 15, 1922

tically relative to said beam, means for supplying material to be weighed to said receptacle, means for temporarily suspending said receptacle from the beam



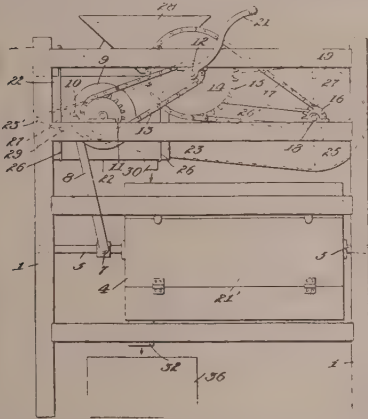
and automatically releasable when the contents of the receptacle have reached a predetermined weight, and means for automatically shutting off the supply of material upon release of said suspending means.

Bearing Date of December 6, 1921

Moisture tester.—Cornelius P. De Roo, Flint, Mich. Filed September 9, 1920. No. 1,399,696.

Grading or separating machine.—Sylvester Marshall, Athens, Ohio. Filed March 9, 1921. No. 1,399,022. See cut.

Claim: The combination with a suitable support, of a laterally rocking longitudinally inclined screen suspended at its ends therein and having plates along its side edges to prevent material from falling through



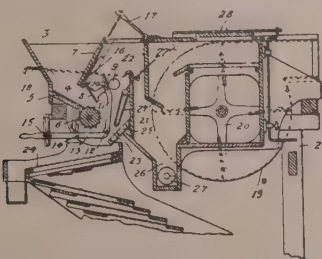
at such points; the mesh of the screen being larger than the greatest transverse diameter of the grains to be graded or separated, and means for rocking the screen.

Bearing Date of December 13, 1921

Bean snipper.—Nicholas A. Johannes, Port Washington, Wis. Filed June 21, 1921. No. 1,400,290.

Feed hopper for grain cleaning machines.—Richard L. Owens, Minneapolis, Minn. Original application filed February 24, 1917. Divided and this application filed February 21, 1919. No. 1,400,234. See cut.

Claim: The combination, with a feed hopper having an inclined feed plate arranged below the bottom of the hopper and forming with the hopper wall a side opening discharge throat, of a force-feed roll located below the edge of said feed plate, an adjustable gate arranged above said roll in position to bear on the grain as it passes over said feed plate, a

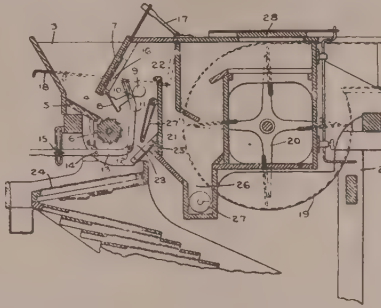


chamber through which the grain passes as it falls from said feed roll, an air regulating valve arranged in said chamber, and a fan and fan-trunk connected to said chamber above said feed roll and regulating valve, for drawing a current of air through said chamber and through the grain as it falls from said feed roll.

Feed hopper for grain cleaning machinery.—Richard L. Owens, Minneapolis, Minn. Filed December 24, 1917. No. 1,400,232. See cut.

Claim: The combination, with a feed hopper having a discharge throat and an inclined feed plate in the bottom thereof, of a feed roll mounted to form a continuation of the surface of said feed plate and extending slightly above the same, a plurality of gates hinged to the wall of said hopper above said roll and having their lower ends adapted to swing back and forth above said roll to open or close said feed opening, said gates normally falling by gravity

into said feed opening and mechanism engaging said gates for supporting them in an open or partially open position and comprising means for allowing said



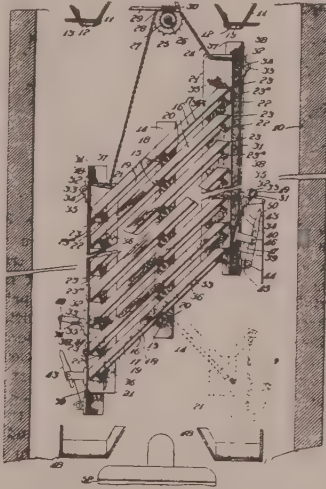
gates to move away from said feed opening under pressure of the grain flowing through said opening.

Wild oats separator.—Richard L. Owens, Minneapolis, Minn. Filed March 14, 1918. No. 1,400,233.

Bag closing and tying machine.—Charles F. Sparks, St. Louis, Mo. Filed October 23, 1920. No. 1,400,327.

Apparatus for treating grain, etc.—William Rotsted, Chicago, Ill. Filed June 10, 1918. No. 1,399,737. See cut.

Claim: The combination of a plurality of trays vertically spaced and superposed one above the other, said trays being mounted to tilt in unison, and a gate member adapted to prevent material from running off the ends of the said trays and adapted to



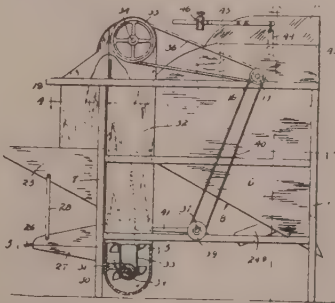
be moved away from the ends of said trays to constitute means for guiding material into said trays, the arrangement including means at the lower end of said gate member for preventing passage of material below the bottom tray, but operable to permit such passage when desired.

Grain door forcing device.—William H. McGann, Minneapolis, Minn. Filed August 30, 1920. No. 1,400,447.

Grain door.—John K. Kopchuk, Melville, Sask., Canada. Filed August 19, 1920. No. 1,400,080.

Grain separator.—Henry H. Meyer, Red Wing, Minn. Filed January 16, 1920. No. 1,400,225. See cut.

Claim: A grain cleaner having a casing with an inclined bottom and having an upwardly inclined trough extending therethrough and provided with a discharge chute at its lower end projecting out of said casing, discharge chutes at each side of said trough at its lower end oppositely directed to the said chute and adapted to discharge beneath the casing, a fan for drawing air upwardly through said trough and discharging the same at the top of the casing, a hopper at the upper end of said trough provided with feeding means leading into the trough, a primary material hopper disposed beneath the upper



end of said casing and said first mentioned hopper for receiving the grain and material mixed therewith, a shoe provided with an inclined scalping means beneath the primary hopper and receiving therefrom and discharging the scalped material at its lower side, a chute beneath said shoe discharging laterally of the casing, and an elevating means at one side of the casing receiving from said last mentioned chute and discharging into the hopper at the upper end of said trough.

Grinding plate for attrition mills.—George Wolff, Paterson, N. J. Filed November 29, 1920. No. 1,400,123.

Bearing Date of December 20, 1921

Feeding device.—Emil R. Draver, Richmond, Ind. Filed October 12, 1921. No. 1,400,668.

Wild oats separator.—Ferdinand W. Busch, Berlin, N. D. Filed June 23, 1920. No. 1,401,039.

Grain washing machine.—Charles Dawson, Tacoma, Wash. Filed October 18, 1920. No. 1,400,664. See cut.

Claim: A grain washing and scouring device comprising, a cylinder having successively from its grain receiving end an imperforate peripheral belt, a perforate belt, a second imperforate belt and a wide perforate belt extending to the other end, deflectors mounted on the imperforate belts, means for advancing grain along the cylinder and means for delivering water into the cylinder through the imperforate belts.

Bearing Date of December 27, 1921

Pulverizer or grinding machine.—George McCrae, Brantford, Ont., Canada. Filed February 12, 1921. No. 1,401,716.

Hopper and discharge chute.—Frank P. Vogt, Chicago, Ill. Filed February 28, 1921. No. 1,401,837.

Bearing Date of January 3, 1922

Feed reducing machine.—Oliver J. Williams, Burlingame, Calif., assignor to Williams Patent Crusher & Pulverizer Company, St. Louis, Mo., a corporation of Missouri. Filed November 26, 1918. No. 1,402,199.

Automatic grain cut off holder.—Harry M. Lehr, Lincoln, Neb. Filed January 19, 1920. No. 1,401,991.

Bearing Date of January 10, 1922

Automatic weighing machine.—George Hoepner, Chicago, Ill. Filed January 26, 1920. No. 1,402,934.

Bearing Date of January 17, 1922

Roughage grinder.—John Holland Letz, Crown Point, Ind., assignor to The Letz Manufacturing Company, Crown Point, Ind., a corporation of Indiana. Filed August 14, 1907. No. 1,403,698.

Bearing Date of January 24, 1922

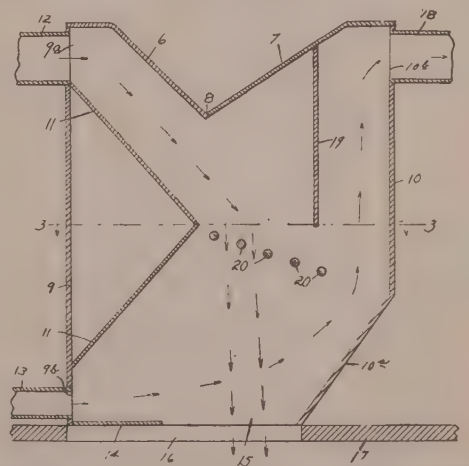
Conveyor.—Walter Geist, Milwaukee, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a corporation of Delaware. Filed February 14, 1921. No. 1,404,692.

Bale tie buckle.—James A. Todd, Fort Worth, Texas. Filed October 17, 1921. No. 1,404,330.

Conveyor.—William H. Lieber, West Allis, Wis., assignor to Allis-Chalmers Manufacturing Company, Milwaukee, Wis., a corporation of Delaware. Filed February 14, 1921. No. 1,404,697.

Grain cleaner.—Christoph Mettler, Sr., Menno, S. D., assignor to The Wonder Grain Cleaner Company, St. Paul, Minn., a corporation of South Dakota. Filed August 24, 1921. Original No. 1,356,777, dated October 26, 1920, filed June 28, 1920. No. 15,275. See cut.

Claim: A grain cleaner having in combination a substantially closed imperforate casing, a grain inlet means adjacent one upper corner thereof, an air blast inlet means adjacent the lower corner thereof on the same side as the grain inlet means, means for directing the grain downwardly toward the center of the



casing terminating at an intermediate point therein, a grain cleaning and distributing device disposed in the path of the grain adjacent the end of but separated from said last mentioned means, an outlet means for the air and impurities carried thereby adjacent the upper corner of the casing opposite the said upper corner, and said casing having a grain outlet opening in its bottom adjacent the side opposite from the air blast inlet means.

Bearing Date of January 31, 1922

Grain valve.—Karl F. Nystrom, Montreal, Que., Canada. Filed February 26, 1921. No. 1,404,887.

Automatic weighing scale.—Arthur Stuart Gilbert, Birmingham, England, assignor to W. & T. Avery, Ltd., Birmingham, England. Filed November 30, 1920. No. 1,405,203.

Universal grinder.—John Holland Letz, Crown Point, Ind., assignor to The Letz Manufacturing Company, Crown Point, Ind., a corporation of Indiana. Filed September 13, 1918. No. 1,404,981.

Conveyor belt.—Ludvig T. Petersen, Youngstown, Ohio. Filed February 9, 1921. No. 1,405,158.

ELEVATOR AND
GRAIN NEWS

THE DAKOTAS

Grant Roberts is succeeded at the Farmers Elevator at Canistota, S. D., by D. Driggs.

The Farmers Elevator at Waubay, S. D., has been purchased by the Equity Elevator Company.

The new elevator of the Equity Elevator & Trading Company at DeLamere, N. D., has been completed.

A. J. Nelson is the new manager at the Farmers Elevator located at Yankton, S. D. Mr. Nelson came from Hornick, Iowa.

William Hansen has resigned his position as manager of the O. & M. Elevator Company at Sanish, N. D. C. M. Anderson succeeds him there.

The Farmers Co-operative Elevator Company operating at Watford City, N. D., has made application to increase its capital stock by \$15,000.

Considerable remodeling has been done to the mill and elevator of the Farmers Mill & Elevator Company at Devils Lake, N. D. It cost \$25,000.

The elevator of the Wm. Krotter Company at Burke, S. D., has been purchased by the Frescoln Bros. The Frescoln concern is composed of F. O. Frescoln, C. L. Frescoln and J. E. Frescoln.

CANADA

D. McKay, of the N. M. Patterson Elevator at Fort William, Ont., is spending the winter with his family in South America.

A grain elevator of 16,000 bushels' capacity is being erected at Berwyn, Alta., for the Alberta Pacific Elevator Company.

John G. Alexander is the new manager of the Scottish Co-operative Wholesale Society at Winnipeg, Man., succeeding the late George Fisher.

The Grand Trunk Railway has decided to increase its elevator capacity at Montreal, Que., and will erect an addition of 1,000,000 bushels' capacity.

Vernon & Buckerfield and the McLellan & McCarter Company, Ltd., of Vancouver, B. C., are having their plants overhauled. J. J. Ross Mill Furnishing Company of Seattle is doing the work.

The Archer-Daniels Linseed Company of Buffalo, N. Y., has awarded the contract to the Fegles-Bellows Construction Company for a 700,000-bushel elevator, concrete wharf and traveling marine tower at Fort William.

Barnett & Record Company has the contract from James Richardson & Son, of Montreal, for the erection of a 1,500,000-bushel elevator at Port Arthur, Ont. It will adjoin the present elevator on the water front and will bring the capacity of the plant to 3,500,000 bushels.

INDIANA

Carl Schuttler succeeds John Robb as agent for A. Waller & Co., at Mt. Vernon, Ind.

Leo Green succeeds Earl Watson as manager of the G. L. Watson Elevator at Powers, Ind.

The Vandalia Elevator Company operating at Vandalia, Ind., is to be dissolved as a corporation.

A new engine is being installed in the plant of the Goodrich Elevator Company at Jolietville, Ind.

The elevator of the Bowen Bros. at Crete (Lynn p. o.), Ind., has been purchased by the Crete Elevator Company.

The Columbus Grain Growers Corporation of Columbus, Ind., is to erect a new elevator or lease one of the local plants.

A brick and concrete grain elevator is to be erected at Knox, Ind., for the Farmers Co-operative Company of which W. M. Quick is manager.

The name of the Sheldon Elevator Company operating at Sheldon (Yoder p. o.), Ind., has been changed to that of the Sheldon Farmers Co-operative Elevator.

Negotiations were recently completed by the Farmers Co-operative Grain Elevator Company for the purchase of the elevator of Born & Co., at Lafayette, Ind. The price was \$15,000. The elevator includes a corn drier as well as other apparatus found in grain elevators.

W. D. Springer's new elevator at Kennard, Ind., has been completed. The Reliance Construction Company did the work. The elevator is modern in every detail, has capacity of 20,000 bushels and

is of wooden construction, covered with galvanized steel. There are also two grinders in the plant, one 20 inches and one 45 inches.

The King Grain Company at Wabash, Ind., has been purchased by H. H. and E. F. Stoops. They will conduct a grain, implement, seed and fertilizer business under the name of the Stoops Bros.

Fred M. Clark, C. L. Sidle and A. V. McCulick have incorporated at Kendallville, Ind., as the City Milling Company. The company will conduct a grain elevator and flour mill. Its capital stock is \$50,000.

OHIO AND MICHIGAN

The elevator of the Sullivan Co-operative Company at Sullivan, Ohio, has been sold by that firm.

At Marine City, Mich., the Marine City Farmers Co-operative Elevator Association was recently organized.

Mr. Holmes is succeeded as manager of the Boneta Elevator Company of Boneta (Sharon Center p. o.), Ohio, by Ray Halloper.

W. M. McCumsey is succeeded as manager of the Clarksville Co-operative Elevator at Clarksville, Mich., by N. W. Stuart.

G. H. Dustman's half interest in Barnett & Dustman at Columbus Grove, Ohio, was bought by James H. Barnett on January 19.

D. Bradley Yoder is succeeded as manager of the Mad River Farmers Exchange Elevator Company at West Liberty, Ohio, by J. L. Mast.

B. F. Tickle of Rockford, Ohio, has purchased the elevator and feed business of C. M. Bayman at Mercer, Ohio. He will take charge March 1.

A grinder has been installed in the plant of the Liberty Grain Company at Rudolph, Ohio. Repairs have been made to the office and the engine is being overhauled.

J. C. Kitter has resigned as manager of the Pulaski Farmers Grain & Elevator Company of Pulaski, Mich., and has gone to Blissfield, Mich., where he will manage a grain elevator.

Paul Bellow will have active charge of the Wolverine Grain Company at Lansing, Mich., which was recently organized. Mr. Bellow was formerly with the Carpenter Grain Company of Battle Creek.

The grain elevator at Troy, Ohio, has been purchased from Martin & Rehmer by R. P. and R. B. Heikes. The elevator has been under the management of Mr. Rehmer. Martin & Rehmer will continue to run the Big Four Elevator in Troy.

EASTERN

A grain elevator and warehouse are to be erected at Easton, Md., for R. R. Spring.

The grain and feed business of Horace Kolb at Philadelphia, Pa., has been discontinued by him.

The Globe Elevator at Buffalo, N. Y., has been taken over by M. P. Ryley. He will operate it.

The grain business of John H. Kuhnley at Manchester, Conn., has been sold to Oscar E. Bailey.

James W. Barker succeeds the Harrisburg Grain & Feed Company at Harrisburg, Pa. The business will be conducted under his name.

The Mutual Elevator at Buffalo, N. Y., is having two new marine legs and steel towers built. The old towers were destroyed during a gale last winter.

To conduct a jobbing business in grain and feed in Binghamton, N. Y., the Southern Tier Feed & Grain Company has been organized. S. M. Clark is manager.

The interest of Mrs. Martha Wiley in the grain and coal business of the Coolidge Grain Company at Charlestown, N. H., has been purchased by Dr. J. W. Coolidge.

The Ontario Milling Company of Oswego, N. Y., has completed plans for the erection of a 300,000-bushel elevator. Compressed air will be used for unloading grain from the steamers.

The Liberty Milling Company has purchased the grain business of Mercer & Jones at Dickerson, Md. The milling company will conduct it in connection with its business at Germantown, Md.

The Fegles Construction Company of Minneapolis has the contract from the Dellwood Elevator Company of Buffalo, N. Y., for the erection of a

new elevator at Buffalo. The present elevator of the company is to be rearranged making possible the rapid transfer of grain cargoes between lake steamers and canal barges. The present elevator has a capacity of 1,000,000 bushels.

The grain elevator at Nashua, N. H., formerly operated by the late Seth D. Chandler has been taken over by the Nashua Beef Company. The firm will handle grain, hay, feed, flour, both wholesale and retail.

An option has been secured on a 3,000,000-bushel elevator at Buffalo, N. Y., by the Pillsbury Flour Mills Company of Minneapolis. Discrimination against Minneapolis in freight rates is the cause of this move, it is stated.

James L. Watson, F. H. Butehorn and Thomas E. Halle have incorporated at Baltimore, Md., as the Hansen Produce Corporation of Maryland. Its capital stock is \$10,000. The company will deal in grain and agricultural products.

The plant of the Curtiss Grain Corporation at Buffalo, N. Y., has been purchased by Maxwell M. Nowak of the Nowak Milling Corporation which will again operate it. The elevator was built by Albert Nowak about 25 years ago. In 1919, Mr. Nowak bought a plant at Hammond, Ind., and a short time afterward sold the Buffalo plant to the Curtiss people. Now that it has been bought back again, it will be used as the Nowak headquarters.

WESTERN

Claude W. Carpenter has resigned his position with the Farmers Equity Exchange at Seibert, Colo.

The grain business has been entered at Las Animas Colo., by T. E. Duncan. He will build a grain elevator there.

Joseph Iten has purchased the elevator of the Valley Mercantile Company at Missoula, Mont. The elevator is being torn down.

The grain elevator at Gillette, Wyo., which has been conducted by A. B. Smith has been leased by P. Peterson who will operate the plant.

A new 8,000-bushel elevator has been completed at Grenville, N. M., by W. J. Stader. It is studied, steel clad, and operated by electric power.

The Midland Elevator at Rigby, Idaho, is under the management of W. C. Valentine. He was formerly with the Midland Elevator Company at Ucon, Idaho.

The Sedro-Woolley Grain Company of Sedro-Woolley, Wash., has had its plant overhauled by the J. J. Ross Mill Furnishing Company of Seattle, Wash.

Capitalized at \$100,000, the Boyd-Conlee Company was incorporated at Spokane, Wash. The company will handle grain, feed and hay. The incorporators are: Ernest A. Boyd, and Herbert A. Conlee.

The California Farm Bureau Elevator Corporation is contemplating the erection of a grain elevator of 1,000,000 bushels' capacity at Oakland, Calif. The company is also planning to build from 6 to 10 elevators at other locations.

The electric light plant at Homestead, Mont., has been purchased by the Farmers Elevator Company of that place. They will operate the plant from their elevator quarters. The light plant was formerly owned and operated by S. J. Dorothy who sold out last summer to the Sterling Electric Company of Minneapolis.

MINNESOTA AND WISCONSIN

George Nielson is planning for the erection of a grain elevator and feed mill at Withee, Wis.

The Great Western Elevator Company, it is reported is considering the erection of a grain elevator at Franklin, Minn.

The capital stock of the Commander Elevator Company at Minneapolis, Minn., has been increased from \$150,000 to \$160,000.

The Farmers & Merchants Elevator at Stephen, Minn., has been purchased by the Farmers Grain Company of Stephen, Inc.

A farmers co-operative elevator association was organized recently at Adams, Minn. The company plans to conduct a grain elevator there.

T. A. Saunders & Son, dealers in lumber, coal and building materials of Milton, Wis., have

bought the elevator and feed mill there of E. L. Barnes, who will remain in charge of the feed mill.

Six new bins have been installed at the elevator of the Farmers Elevator Company at Wells, Minn. A new automatic scale has been installed.

The elevator of O. A. Johnson, proprietor of the Glenwood Grain & Fuel Company at Glenwood, Minn., which burned last April, has been rebuilt.

Marie Ziegenhagen has given up her office as secretary and treasurer of the Willy Company, grain dealers and millers of Appleton, Wis. She was one of the founders of the company.

G. C. Nielson has leased a piece of property at Ladysmith, Wis., and will engage in the grain and feed business. An addition is being erected to the building which will be used for grain storage.

E. O. Ford, W. W. Adams and H. R. White have incorporated at Huntley, Minn., as the Huntley Elevator Company. Its capital stock is \$20,000. The firm will conduct a general grain business.

The Cargill Elevator at Montrose, Minn., has been taken over by McAlpin & Elsenpeter of the Buffalo Flour Mills. The company will establish a large wholesale and shipping depot for their products and will conduct a general grain business.

To conduct a general business in buying and selling grain, produce, flour, feed, livestock, etc., O. O. Leo, R. H. Holbrook, and C. P. Moses, have incorporated the Eau Claire Co-operative Shipping Association at Eau Claire, Wis. Its capital stock is \$1,000.

SOUTHERN AND SOUTHWESTERN

Bouquet & Ludwick have completed a new 12,000-bushel elevator at Perico, Texas.

The elevator of the Farmers Co-operative Elevator Company at Red Rock, Okla., has been closed down.

E. C. Hampton is succeeded as manager of the O'Bannon Company at Wagoner, Okla., by George Hassell.

The Nelson Grain Company has opened up for business at Longview, Texas. Ed Nelson controls the company.

A new 15,000-bushel studded, steel clad elevator has been completed at Jet, Okla., for the Choctaw Grain Company.

A 13,000-bushel elevator has been completed at Huntton (Booker p. o.), Texas, for the Huntton Equity Exchange.

The Farmers Grain & Elevator Company of Groom, Texas, has increased its capital stock from \$10,000 to \$40,000.

The Waldman-Ross Grain Company of Houston, Texas, has changed its name to the Texas Grain & Elevator Company.

The capital stock of the Howe Grain & Milling Company of Howe, Texas, has been decreased from \$50,000 to \$15,000.

A 70,000-bushel studded, steel clad elevator has been completed at Canton, Okla., for the Farmers Co-operative Association.

A grain elevator of 15,000-bushels' capacity is to be erected at Blackwell, Okla., by Monroe G. Wright of Pauls Valley, Okla.

The management of the Farmers Elevator at Laverne, Okla., is under the direction of Robert Rich. He succeeds S. T. Love.

William Fitzgerald, J. W. Talton and L. P. Durden have incorporated at Poteau, Okla., as the Poteau Mill & Elevator Company.

The Hall Milling Company's new elevator at Sylvester, Ga., is nearly completed. It is equipped for handling grain, beans and peanuts.

Farmers around Eddy, Okla., have organized a farmers elevator company and laid plans for the erection of a \$15,000 grain elevator there.

Business has been started at Charleston, S. C., by George S. McGrath & Co., general brokers. They will handle grain, hay, coal, lumber, etc.

L. Heat, Albert Jones and L. S. Wallis have incorporated at Perkins, Okla., as the Farmers Union Co-operative Exchange. Its capital stock is \$5,000.

R. L. Dunmire, M. C. Dunmire and S. S. Williamson have incorporated at Enid, Okla., as the Enid Grain & Feed Company. The firm is capitalized at \$10,000.

A \$5,000,000 bond issue has been voted for by the citizens of Norfolk, Va., for the erection of a new pier, bulkhead wharf, grain elevator and railroad trackage.

Douglas W. King has discontinued his connection with the Blue Star Elevator at San Antonio, Texas, and has re-engaged in business for his own account in San Antonio, with offices in the Alamo National Bank Building.

The Boepple Grain Company has leased the McCafferty Elevator at Covington, Okla., for the rest of the season. The Boepple company will

tear down its old elevator and erect a new one and install feed grinding and cleaning machinery. A new warehouse will also be built.

A. A. Sterling is president; J. C. Garrison, secretary-treasurer of the Texas Grain & Elevator Company of Houston, Texas, which was recently incorporated there.

P. W. Williams' interest in the Alabama Cotton & Grain Company at Hartsells, Ala., has been purchased by Mr. Day and Mr. Thomas, who will continue the business.

The Ponca City Milling Company is to erect at Ponca City, Okla., a concrete, fireproof elevator of 70,000 bushels' capacity. D. J. Donahue is president of the company.

Lloyd Laughlin has resigned his position as manager of the Farmers Co-operative Association operating an elevator at Gage, Okla. He is now with the U. S. Grain Growers, Inc.

A warehouse and grain storage plant costing \$50,000 is to be erected at Norfolk, Va., for S. C. Scott & Co. It will be erected on the site of the plant which burned a year ago.

R. M. Stegall, L. Bryant, A. Barr, D. C. Johnson and J. A. Chambliss have incorporated at Chattanooga, Tenn., as the Lookout Milling & Grain Company. Its capital stock is \$10,000.

The Waukomis Co-operative Elevator Company of Waukomis, Okla., has changed its name to the Waukomis Grain Company. F. P. Atherton, R. C. Mahne and C. J. Eifert are the incorporators. Its capital stock is \$20,000.

W. H. Finley has sold his interest in the Finley & Roberts Grain Company at Dallas, Texas, and the business is now being conducted under the name of the Roberts Grain Company. Mr. Finley is operating at the same place as W. H. Finley, broker.

The J. C. Mytinger Grain Company of Wichita Falls, Texas, has just placed the contract with the Burrell Engineering & Construction Company of Chicago, for a concrete terminal head house in connection with the tanks which the Burrell company built 6 years ago. The new addition will give them a complete terminal elevator. The capacity of the head house will be 100,000 bushels.

ILLINOIS

Three new bins have been added to the elevator of H. J. Ruckrigel at Ottawa, Ill.

The Yeazel Elevator at Alvin, Ill., has been purchased by Gene Smith of Rossville.

An electric motor has been installed in the plant of the Co-operative Grain Company at Lenzburg, Ill.

W. T. Hamilton is succeeded as manager of the Farmers Elevator Company at Blandinsville, Ill., by William Susdorf.

J. M. Horner's interest in the grain and feed business at Kewanee, Ill., has been sold to his partner, R. T. Otley.

The grain elevator at Albion, Ill., formerly operated by Epler & Wilson has been purchased by Charles L. Boyles.

Herbert Marshall is succeeded as manager of the Farmers Elevator Company at Cruger (Eureka p. o.), Ill., by Chris Risser.

H. M. Morris has left the Farmers Grain Company at Lodge (Monticello p. o.), Ill., and has gone with the Farmers Grain Company of Chestnut, Ill.

At sheriff's sale in January the two elevators of Roy L. Waldruff at Chrisman, Ill., were sold to Lottie W. Scanling and L. W. Schnitker.

The plant and business of the Mutual Elevator Company at Altemont, Ill., have been purchased by the Johnston-Hicks Mill Company.

The elevator of the Crescent City Farmers Elevator Company at Crescent City, Ill., has been equipped with two signaling grain distributors.

The site of the DeForest Bros.' elevator at Adair, Ill., has been purchased by Bader & Co. They will rebuild the elevator which was destroyed by fire.

A. M. Green has purchased the elevator of the American Grain Company at Maroa, Ill. The elevator at one time belonged to the Shellabarger Company.

The Randolph Co-operative Grain Company at Randolph, Ill., is building coal sheds and in the future will handle coal, salt, twine, and oil in addition to grain.

R. A. Mansfield is now manager of the White Hall Cooperative Mill & Elevator Company of White Hall, Ill. He was formerly in charge of the Elmore grain and elevator business at Roodhouse.

H. M. Norris has left the De Land Co-operative Grain Company at De Land, Ill., and has gone with the Farmers Grain Company at Chestnut. Amos Woodman of Farmer City succeeds Mr. Norris at De Land.

L. M. Caldwell & Co., recently completed their elevator at Caldwell Switch (Mansfield, p. o.), Ill.

The equipment includes one leg with 14x6 inch buckets, a six-ton dump scale, a 1,500-bushel per hour scale, and a 12-horsepower engine.

The new elevator of the Joliet Grain Company at Birds Bridge (Minooka p. o.), Ill., has been completed. It is a 20,000-bushel elevator, equipped with modern machinery; it is electrically driven.

George Buchanan and Charles B. Spang have consolidated and will operate their elevators at Westville, Ill., under the name of the Westville Elevator & Feed Company. The officers of the company are: George Buchanan, president; C. B. Spang, general manager; M. L. Hill, local manager.

IOWA

R. B. Jones has resigned his position as manager of the Farmers Elevator Company at Center Point, Iowa.

W. J. Osborne is succeeded as manager of the Farmers Elevator Company at Holstein, Iowa, by C. H. Eden.

H. Courtney Brown has purchased a grain elevator located at Winterset, Iowa, and took possession at once.

The Farmers Union Co-operative Company has completed and will operate a modern elevator at Tingley, Iowa.

The Farmers Elevator at Chapin, Iowa, is to be conducted by E. Price. He succeeds Frank Burwell, who resigned.

The elevator of the Farmers Elevator Company at Modale, Iowa, is to be remodeled. Two new legs will be installed.

H. W. Thompson now controls the Farmersburg Grain Company at McGregor, Iowa. He has bought his partners' interests.

The elevator of G. G. Bowen at Searsboro, Iowa, is being razed. It will be replaced immediately with a modern building.

The contract has been let by the Farmers Elevator Company of Hamburg, Iowa, for the rebuilding of the grain elevator which burned.

Flossie Eaton is manager of the Farmers Elevator Company at Boone, Iowa. She takes the place of her father, W. W. Eaton, who died just recently.

The elevator of the Farmers Elevator Company at Lake City, Iowa, has been sold by the company's receivers to L. H. Adams & Co., of Omaha, Neb., for the consideration of \$11,600.

Capitalized at \$75,000, the Gladbrook Grain & Lumber Company has been incorporated at Gladbrook, Iowa. Charles Liethje is president; I. A. Merrill, vice-president and George Koster, secretary and treasurer.

F. J. Forbes has purchased the elevator of J. B. Maricle at Bagley, Iowa, and will operate under the name of the Forbes Grain Company. He will be assisted by his son, Charles who, until recently was manager of the Garrison (Iowa) Grain & Lumber Company.

The Jenkinson Elevator at Sheldon, Iowa, operated by John Wolf has been purchased by the B. B. Anderson Grain Company of Estherville. The latter company is composed of father and two sons, one of whom, C. M., will operate the elevator. Possession was given February 13.

MISSOURI, KANSAS AND NEBRASKA

A new grain elevator is to be erected at Meriden, Kan., in the near future.

A new concrete elevator is to be erected at Guide Rock, Neb., by L. W. Ely.

The Grange Co-operative Elevator Company operating at Gibbon, Neb., has been dissolved.

The dissolution of the Hoag Farmers Elevator Company of Hoag, Neb., has been announced.

The Tribune Grain & Implement Company of Tribune, Kan., is the property of Frank Kucera.

The Bodman-McConaughy Elevator at Holdrege, Neb., has been purchased by C. E. Johnson & Sons.

A co-operative company is to be organized at Geneva, Neb., to operate a grain elevator there.

W. E. Roy is succeeded as manager of the Clarence Grain Company at Clarence, Mo., by Carl Adams.

A new grain elevator is to be erected at Pleasant Valley, near Liberal, Kan., for the Moscow Elevator Company.

T. Schlossler has resigned his position as manager of the Farmers Union Elevator Company at Paul, Neb.

The management of the Farmers Grain, Coal & Lumber Company at Hallam, Neb., is under B. B. Bramstadt.

The Nebraska Mill & Elevator Company of North Platte, Neb., is successor to the Leypoldt & Pennington Company at that place. The firm will conduct a wholesale grain, hay and seed business. The company also handles coal, feed and farm implements. L. P. Jepson is president; W. E. Starr,

first vice-president; W. M. Simants, second vice-president; S. M. Souder, secretary and treasurer.

Capitalized at \$15,000, the Independence Mill & Elevator Company has been incorporated at Independence, Mo.

The Farmers Elevator Company has been incorporated at Strickler (Iuka p. o.), Kan. Capital stock is \$10,000.

Reorganization of the Farmers Elevator Company of Otterville, Mo., has taken place. Its capital stock is \$20,000.

The M. L. Meyers Grain Company of Woodston, Kan., is contemplating the erection of a new elevator this spring.

The elevator of the Farmers Grain Company at Prairie Home, Neb., has been purchased by the Aden Grain Company.

The Union Grain Company of which O. C. Glenn is manager, is planning on the erection of new coal sheds at Rozel, Kan.

The elevator of the Farmers Elevator Company at Abdal (Superior p. o.), Neb., which burned not long ago is to be rebuilt.

A. B. Magnuson is succeeded as manager of the Farmers Union Elevator Company at Lindsborg, Kan., by C. U. Bergstrom.

New auto scales are to be installed in the plant of the Partridge Co-operative Equity Exchange at Partridge, Kan., this year.

A. O. Burkett is succeeded as manager of the Farmers Union Co-operative Company of Beatrice, Neb., by Robert W. Zark of Roco.

A new gas engine is to be installed in the plant of the Farmers Union Co-operative Association of Vesta, Neb. J. W. Bailey is manager.

The Co-operative Equity Exchange of Garden City, Kan., is planning to erect a new grain elevator there with capacity of 40,000 bushels.

The elevators of the Otto Weiss Milling Company at Andover and Greenwich, Kan., have been purchased by the Kansas Milling Company.

J. C. Welch has purchased the elevator at Milford, Neb., formerly owned by W. J. Hunt, and is now operating it under the name of the J. C. Welch Grain Company. Mr. Welch was formerly man-

ager of the Farmers Elevator and is succeeded there by B. D. Blivins in that position.

Operations have been resumed in the elevator of the Shellabarger Mill & Elevator Company at Sylvan Grove, Kan., with A. H. Bacon in charge.

Capitalized at \$15,000, the Farmers Union Co-operative Elevator and Supply Company was incorporated to operate at Sherwin Junction, Kan.

Capitalized at \$50,000, the Eureka Co-operative Elevator & Warehouse Association has been incorporated at Eureka, Mo. Frank Mottert is president.

The elevator of the Farmers Union at Olathe, Kan., which burned some time ago is to be rebuilt. The construction will probably start in the spring.

The Meade Elevator Company is now operating the elevator at Meade, Kan., which was formerly leased by O. E. Cox. Theo. Burkhardt is manager.

Harry G. Stevenson is now grain salesman for the Equity Union Grain Company of Kansas City. He was formerly connected with the Stevenson Grain Company.

L. C. Schultz, John M. Leiker and R. W. Snyder have incorporated at Ness City, Kan., as the Ness County Farmers Co-operative Elevator Union. Its capital stock is \$20,000.

The interest of Mr. Leslie in the Pratt-Leslie Grain Company at Harper, Kan., has been purchased by Roy O. Pratt. He will operate as the Pratt Grain & Feed Company.

To buy and sell grain and farm products, the Fremont Co-operative Mercantile Company has been incorporated at Fremont, Kan. C. Hawkinson, A. Palmquist and C. Sundgren are interested.

The DeShon Feed & Fuel Company's business at Cameron, Mo., has been purchased by the recently organized Cameron Co-operative Elevator Company. They will erect a 12,000-bushel concrete elevator.

The D. O. Coe Seed & Grain Company of Topeka, Kan., will rebuild the stone storage house and garage which was recently partially destroyed by fire. The reconstruction work has been started already.

Reorganization of the Equity Union Grain Company of Kansas City, Mo., has taken place. The company will increase its capital stock from \$20,000 to \$100,000 and will operate entirely on its own resources hereafter.

hay department of E. L. Rogers & Co., and later was manager of the company. His widow and two sons survive.

HENIKEN.—Benj. F. Heniken died suddenly at Grayville, Ill., where he had been called because of the illness of a brother. Mr. Heniken was Federal grain inspector and was well known in southern Indiana.

JAQUITH.—Roy Jaquith was shot and killed by robbers on February 8 while on his way to his farm at Mottville, Ind. He resided at South Bend, Ind.; he was formerly a member of the National Hay Association.

KOLB.—Charles W. Kolb died on February 14 at his home in Collingswood, N. J., aged 58 years. He was formerly hay inspector of the Commercial Exchange but entered Government service during the war in the Forage Department. Previous to entering the service of the Exchange, he was inspector of hay for E. H. Price. His widow survives him.

LEVY.—A. Levy died on February 20 at Los Angeles, Calif. He was connected with A. & H. Levy Company of Oxnard, and was well known in grain circles.

LONG.—William H. Long died in Los Angeles, Calif., on March 10 six days. He was formerly a member of Bartlett Frazier & Co., and was at one time an associate of James H. Patten. He retired from business several years ago and on January 1 went to Los Angeles to live.

MILLAR.—A. D. Millar was accidentally killed when preparing to go on a shooting trip. He tripped on the stairs and discharged his gun. Mr. Millar was for years in the grain and real estate business at Regina, Sask.

MORIARTY.—Charles P. Moriarty died from double pneumonia at Omaha, Neb. He was president of the Moriarty Grain Company and was a well known member of the Omaha Grain Exchange.

MORRIS.—On February 20, Henry Isaac Morris died at Chicago, Ill. He had been a member of the Board of Trade since 1877.

OLIVER.—J. B. Oliver aged 82 years died in Milwaukee, Wis., recently. He was one of the oldest grain men there. For a long time he had been a member of the Chicago Board of Trade.

OWEN.—H. B. Owen on February 22 committed suicide by hanging himself. He was the owner of a grain elevator at Merwin, Mo.

PACKARD.—On February 18 Asa D'Alton Packard died suddenly at the home of his son, D'Alton. Mr. Packard had resided in Sherburn, Minn., since 1887 conducting a grain business. He retired a number of years ago. Mr. Packard was 80 years old.

POWELL.—W. S. Powell died from cancer of the throat at his home in Cairo, Ill. Mr. Powell for 13 years had been chief grain inspector of the Cairo Board of Trade. Previous to that for 29 years he had been connected with the Chicago Board of Trade.

QUICK.—At the age of 50 years, A. J. Quick died at Rich Valley, Ind. He was manager of the grain elevator there. His widow and two children survive him.

QUISENBERRY.—James C. Quisenberry died at Morningside, Iowa. He was formerly president and manager of the Morningside Elevator & Coal Company.

SHAW.—J. H. Shaw died from an operation for appendicitis at the age of 49 years. He was partner with C. W. Goltry in the grain business at Enid, Okla. Mr. Shaw was a member of the Tri-State Arbitration Board of the Oklahoma Grain Dealers Association, and was prominent in the activities of grain men in that section of the country. His widow and two daughters survive him.

SMITH.—J. Sidney Smith died on February 26 at San Antonio, Texas. He was formerly in the grain business at Kansas City and St. Louis.

WHELPLEY.—Charles H. Whelpley died suddenly on February 15 from pneumonia. He was 29 years of age and manager of the Western Terminal Elevator Company of Winnipeg.

WINTON.—C. M. Winton died from pneumonia during the last week of February. He was cashier and general office man for B. C. Christopher & Co. of Kansas City.

WILDER.—Fred Wilder died at his home in Blue Earth, Minn., on February 13. Mr. Wilder was formerly grain buyer at the Farmers Elevator at Delavan, Minn.

ZIMMERMAN.—George J. Zimmerman, president of the Milwaukee Malting & Grain Company, died on February 28 at his home in Milwaukee, Wis. Mr. Zimmerman had been a member of the Milwaukee Chamber of Commerce for 40 years and had been president of the grain company for 15 years.

A voluntary petition in bankruptcy has been filed by the Miller Grain Company of Wichita, Kan. Its assets are \$13,246; its liabilities, \$28,000.

OBITUARY

ANDERSON.—William H. Anderson died on February 14 at his daughter's home in Oak Park, Ill. Mr. Anderson, who was 91 years, joined the Chicago Board of Trade in 1862 and retired a few years ago.

AYTON.—James Ayton died in Baltimore, Md., recently. He was grain inspector for Balfour, Guthrie & Co., of Baltimore and was a member of the Grain Exchange there.

BOORN.—Ford Boorn died on January 16 at Port Huron, Mich., aged 55 years. Mr. Boorn conducted a hay business in Port Huron. He was a member of the National Hay Association.

BURNS.—Henry V. Burns died on February 20 at his home in Buffalo, aged 64 years. He had for years been connected with the grain trade at Buffalo. His widow and one daughter survive him.

CARTER.—On March 3, Thomas W. Carter died at his home in St. Louis, after a short illness. He entered the grain business 40 years ago with Billingsley & Nanson; two years later he formed the Fraley-Carter Company, and in 1888 established the Carter & Bowman Commission Company.

COX.—John W. Cox, at one time widely known in the grain and feed business, having been a partner for many years with his brother, Charles M. Cox in the firm of C. M. Cox & Co., of Boston, died at the age of 57 years at his home in Coronado, Calif. About seven years ago he removed to California on account of poor health. He was vice-president of the Chas. M. Cox Company, and president of the St. Albans Grain Company of St. Albans, Vt. His genial disposition and friendly qualities rendered him popular in the grain trade in New England.

DUSENBERRY.—On January 18, Col. Edwin Brooks Dusenberry passed away at his home in Huntington, L. I., N. Y. Col. Dusenberry was a veteran of the Civil War. After that war he took up the hay business and continued in that in New York City, for many years. He served as treasurer of the New York Hay Exchange for some time.

EATON.—W. W. Eaton died recently at Boone, Iowa. He was manager for the Farmers Elevator there.

EDWARDS.—A. M. Edwards died recently at

Medford, Okla. He was connected with the Medford Mill & Elevator Company for years. He retired about five years ago.

EMERY.—Thomas F. Emery, flour inspector for the Boston Chamber of Commerce, died suddenly on February 5 at Boston, Mass. For more than 40 years he had been in the flour business.

FISHER.—E. D. Fisher died at his home in Kansas City, Mo. He was president of the E. D. Fisher Commission Company and was a charter member of the Kansas City Board of Trade. Mr. Fisher was 80 years old when he died.

FISHER.—On February 13, George Fisher died suddenly from heart failure. He was president of the Winnipeg Grain Exchange in 1909-1910.

GILLESPIE.—After a short illness, J. H. Ross Gillespie died at Vancouver, B. C. He was general manager of the Alberta Pacific Grain Company at Vancouver and was a prominent member of the Board of Trade. His widow, and four children survive him.

GREEN.—William A. Green died at Lima, Ohio, aged 77 years. He was a retired grain dealer.

HAGAR.—Walter F. Hagar died on February 27, aged 71 years. He was a member of the Philadelphia Commercial Exchange for 45 years and had served as president in 1889-1900, and 1904; he was a director for 18 years.

HANSBERGER.—Lawrence H. Hansberger died from heart disease on February 22 at Cincinnati. He was a resident of Huntington, W. Va., and was a representative of the Omaha Alfalfa Milling Corporation.

HERGER.—A. W. Heger died following an operation. He was in charge of the enforcement of the Federal Grain Standard Act in Chicago. In 1917 he was transferred to the solicitor's office in the Washington office of the Bureau of Markets as assistant to grain supervisor, charged with the enforcement of the Act. In 1919 he was transferred to Chicago.

HOLLAND.—Norwood P. Holland died on February 21, aged 49 years, at his home in Philadelphia, Pa., from pleural pneumonia. He had been a member of the Commercial Exchange since 1901 and had served on the Hay and Straw Committee for many years. He was for years manager of the

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FIRES-CASUALTIES

Taylor Springs, Ill.—The feed store of Dominick Armario was destroyed by fire.

Lockesburg, Ark.—Fire destroyed the R. W. Grady flour and feed store recently.

Malaga, N. J.—Fire destroyed the seed warehouse and general store of Thomas Evans.

Red Oak, Iowa.—Fire destroyed the office building of the Turner Elevator Company.

Tiber, Mont.—Fire damaged the elevator of the Montana Emporium Company recently.

Los Angeles, Calif.—Fire destroyed recently the plant of the Salt Lake Feed & Fuel Company.

New Rockford, N. D.—The elevator of the Farmers Elevator Company was destroyed by fire.

Hillview, Ill.—The V. C. Elmore Elevator burned. The elevator was valued at \$18,000; grain at \$2,000.

Stockdale, Ill.—Fire damaged the old elevator here owned by George H. Weitz. The damage was covered by insurance.

Primghar, Iowa.—On March 3 fire destroyed the Farmers Elevator. Not much grain was in the elevator at the time of the fire.

Brownlee, Sask.—Fire on February 15 destroyed the grain elevator here. The loss on structure and contents amounted to \$10,000.

Sun Prairie, Wis.—On February 7 fire destroyed the grain and feed elevator of Chase & Sons. The loss is partly covered by insurance.

Antelope, Mont.—The Rishoff Elevator was destroyed by fire on February 16 together with 10,000 bushels wheat and 1,500 bushels flax.

Terryville, Conn.—Fire destroyed, together with contents, the grain elevator and storage shed of Josiah H. Wood. The loss amounted to \$10,000.

New Albany, Ind.—The elevator of the New Albany Elevator Company was destroyed by fire. Insurance amounting to \$23,000 was carried on the plant.

St. Louis, Mo.—Fire damaged the three-story grain elevator of the Paul Schmidt Supply Company, together with a considerable quantity of grain.

Badger, Minn.—The elevator of the Crooks Milling Company was destroyed by fire. The loss on building amounted to \$4,500; on contents, \$7,500.

McClusky, N. D.—The elevator of the Farmers Elevator Company together with some grain was destroyed by fire. The loss was covered by insurance.

El Reno, Okla.—Fire on February 25 destroyed the office and warehouse of the N. B. Waldo Feed & Milling Company. The loss included 10 carloads of Alfalfa.

Shepherdsville, Ky.—On February 24, the stores of Smith & Smith and C. A. Lutes were destroyed by fire. Both of these concerns handled seeds and implements.

Gordon, Ohio.—On February 7, the elevator of W. S. Studabaker was burned together with 2,000 bushels corn and feed. The loss was partly covered by insurance.

Bradfordville, Ky.—The elevator here of the Bateman Milling Company was destroyed by fire together with 10,000 bushels wheat. The fire was of unknown origin.

Marietta, Minn.—The Great Western Elevator here was completely destroyed by fire on February 11. Several thousand bushels of grain were also destroyed by the flames.

New York, N. Y.—On March 7 fire destroyed the four story grain elevator of William H. Payne & Co., with a loss of \$150,000. About 75,000 bushels of grain were destroyed.

Hamburg, Iowa.—On February 2 fire destroyed the Farmers Elevator Company's elevator with a loss of between \$15,000 and \$20,000. Several thousand bushels of corn were destroyed.

San Antonio, Texas.—The large warehouse of the Blue Star Elevator Company was destroyed by fire with a loss of \$40,000. A considerable quantity of hay and feedstuffs was also destroyed.

East Greenwich, N. Y.—On February 1 fire destroyed the feed store and grist mill of Elizabeth O'Brien. The blaze is believed to have been started by the stove in the storehouse.

Bard (Paragould p. o.), Ark.—The warehouse of the House-Jones Grain Company of Paragould, Ark., at this place was destroyed by fire with a loss of \$2,500. No insurance was carried.

Arcanum, Ohio.—The elevator belonging to the Gordon Grain & Mercantile Company was totally

destroyed by fire on February 7. There were 400 bushels of corn in the elevator at the time of the fire. The loss amounted to \$12,000; insurance, \$7,500. No cause for the fire has been ascertained so far by the owners.

Oakley, Mich.—Fire on February 4 damaged the elevator of the Chatterton & Son. The loss amounted to \$10,000, covered by insurance. The elevator was known as Oakley Elevator Company, Inc.

Pontiac, Mich.—The C. E. Depuy Elevator here was destroyed completely by fire on March 2, with a loss which will run in thousands of dollars. The elevator contained about 13 carloads of grain and seed.

Tulia, Texas.—Fire destroyed the feed mill of J. P. McCoy situated between here and Silverton, Texas. The fire was caused by the backfiring of Mr. McCoy's automobile. Mr. McCoy was seriously burned.

St. Paul, Minn.—Lightning struck and set fire to the elevator of the Wayne Elevator Company, with a loss of \$65,000. Twenty-five bins containing 9,000 bushels wheat and 7,000 bushels oats were destroyed.

Wakefield, Neb.—Fire destroyed on February 9 with a loss of \$20,000, one of the two elevators of the Crowell Lumber & Grain Company. Grain, amounting to 8,000 bushels, and a quantity of coal were burned.

Seminole, Okla.—Fire of unknown origin destroyed the plant of the Seminole Mill & Elevator Company with a loss of \$55,000. The loss is partly covered by insurance. The warehouse contained

1,000 bushels wheat and 4,000 bushels oats. Owners have not decided as yet whether to rebuild or not.

Muscotah, Kan.—Fire destroyed the grain elevator here belonging to T. B. Kelley. The elevator contained 7,300 bushels wheat, besides corn, oats and feed. The loss is partly covered by insurance.

Gadsden, Ala.—The South Arkansas Grocery Company lost a large feed warehouse by fire during the month of February, with a loss of \$6,000. This loss is covered by insurance. The building will be rebuilt.

Havre, Mont.—On February 11, the grain elevator and warehouse of the H. Earl Clack Company were destroyed. The grain and seed in buildings, including 5,000 bushels of flax, were total loss. The loss was \$50,000.

Van Alstyne, Texas.—The warehouse of the Grayson Mill & Grain Company burned together with entire contents. The fire was of unknown origin. The loss to the company is estimated at \$7,500, with no insurance.

Lowell, Mass.—On February 5 the mill and elevator of the Thorndike Coal & Grain Company were destroyed by fire with a loss of \$50,000. This loss was partly covered by insurance. David Siskind, the owner, will rebuild.

Basswood, Man.—On February 17 fire destroyed the elevator and flour shed of the Ogilvie Flour Mills Company, Ltd. The elevator contained 25,000 bushels grain and almost a carload of flour. The cause of the fire was unknown.

Lockney, Texas.—The entire elevator and plant of the Lockney Coal & Grain Company were burned together with contents. Cause of fire is unknown. The loss amounted to \$25,000; insurance, \$15,000. The elevator and plant will be rebuilt.

Wichita Falls, Texas.—The grain elevators at the Wichita Mill & Elevator Company were destroyed by fire with a loss of \$50,000. Two grain houses were destroyed and one steel bin warped. The elevators had been used as an auxiliary in handling grain, but did not contain any grain.

TRANSPORTATION

REDUCED GRAIN RATES TO COAST

A reduction of approximately 20 per cent in present grain rates from Chicago to the Pacific Coast was announced on February 7 by the Chicago, Burlington & Quincy, the Great Northern and the Northern Pacific Railroads for the summer months. The reduction was said to place the rates on the same level as prior to the 1920 increase.

TO PROTECT MARKET RELATIONSHIPS

The Interstate Commerce Commission recently amended its order in No. 12229, western grain rate case, by inserting between second and third paragraphs of its order of November 21 the following:

"It is further ordered that where a strict observance of the provisions of the preceding paragraphs hereof would result in the disruption of relationships between important grain markets or disturb the equalization of rates via recognized and established gateways from important producing territories to important consuming centers, departures from the exact percentages hereinbefore prescribed may be made to the extent necessary to maintain the relationships which have heretofore existed between the said markets or the equalization of rates via the said gateways."

INDUSTRIAL TRAFFIC LEAGUE MEETING

The Industrial Traffic League, meeting in Washington recently, passed a number of important resolutions. In regard to rate reductions the following was adopted:

In view of the action by the Interstate Commerce Commission since the November meeting, at which the League approved the action of the Executive Committee with respect to horizontal reductions in freight rates and charges when the carriers' revenues warranted reductions:

Be it resolved, That the National Industrial Traffic League, through its officers, appear before the Interstate Commerce Commission in the hearings in Docket 13293 and take the position that if and when, in the opinion of the Commission, freight rates and charges may properly be reduced, the reduction should be made in the same manner in which the advances were made in Ex Parte 74.

Be it further resolved, That the League is of the opinion the finding of the Commission should be definite with respect to the question of general reductions, so that all uncertainty with respect to this question be removed, that business men may make their commitments with some degree of certainty and stability.

Be it further resolved, That the League is fully cognizant of the necessity for the carriers' revenues being adequate, in every respect, to insure proper transportation facilities and service in times of business prosperity and to support their credit, but also recognizes the imperative necessity, as an aid to the

restoration of normal business conditions, that the present high level of rates be reduced as soon as possible.

The League adopted a resolution for the repeal of Section 15a after adding this paragraph: "But that adequate provisions be made to preserve in the Commission the power to remove any burden upon interstate commerce that may exist or be created by reason of any statutory rates or fares, and that simple statutory recognition be given to the right of the carrier to have a fair return upon its investment devoted to public use."

The Capper and Nicholson Bills were opposed and the resolution on jurisdiction over intrastate rates was adopted with the following added:

We further recommend that specific reservation be made of the power of the state regulatory bodies to hear and determine in accordance with the laws of the several states, complaints as to intrastate rates, fares and charges over which the Interstate Commerce Commission has assumed jurisdiction, subject to the review and approval by the Interstate Commerce Commission, only to the extent that questions of unjust discrimination against interstate commerce may be involved.

This resolution has since been taken care of by the decision of the Supreme Court in the Wisconsin rate case.

COARSE GRAIN RATES TO WESTERN POINTS

The Commission, speaking through Commissioner Daniels, in No. 11369, Van Dusen Harrington Company et al. vs. Canadian Pacific, Director-General, et al., opinion No. 7251, 64 I. C. C., 461-7, held unreasonable coarse grain rates of 76 cents from points in group F and 64 cents from points in group G, the points of origin being in Minnesota, the Dakotas, Nebraska, Kansas and Iowa, to destinations in Montana, Idaho, Oregon and Washington, as increased June 25, 1918, from 50 cents to the wheat rate basis, to the extent that they exceeded 61 cents. The Commission ordered reparation to that basis.

The Commission found that the rate for comparable distances, eastbound, was 61 cents. Commissioner Daniels said, that compared with some of the East and West bound rates on wheat and coarse grains, to which reference was made during the course of the case, the 61-cent rate might seem to have been somewhat too high for coarse grain. Mr. Daniels recalled, however, on the question of whether wheat rates on coarse grains were too high, that the Commission had passed on that subject in 56 I. C. C., 133 and 61 I. C. C., 399, and that, therefore, that question was not really at issue in this case.

FIELD SEEDS

CLOVER SEED IN ONTARIO

A considerable quantity of the 1921 crop of Alsike, Red and Sweet Clover remains in the hands of Ontario farmers, according to reports made by A. A. Knight, agricultural representative of Victoria County. In Ontario County there is little Red Clover on hand, although Sweet Clover is fairly abundant. Evidently there will be enough of Sweet Clover to go around at reasonable prices. Good Red and Alsike may be scarce.

NEW SEED TRADE MARK

In the February 28 issue of the U. S. Patent Office Gazette the following new seed trademark was published: "VAN ANTWERPS" field and gar-

VanAntwerps
THE BEST ONLY

den seeds, namely, Alfalfa, beans, beets, and other vegetables, rye and wheat. Van Antwerp's Drug Corporation, Inc., Mobile, Ala. Filed June, 7, 1921. Serial No. 148,825.

LABELING IMPORTED SEED

An amendment to the Seed Importation Act which will prohibit the importation of seeds enumerated in Section 1 without stating on the container the nature and quantity of the contents, the name and address of the shipper and consignee and the country where grown has been proposed by Representative Cantrell of Kentucky. The Secretary of Agriculture would be empowered to make rules for carrying out the proposed amendment.

Interstate shipment of seeds would be similarly regulated; but the amendment would not prohibit the shipment or importation of mixtures of seeds so long as the requirements of the law are complied with. In the case of mixtures, it would be necessary to state the country of origin of each kind of seed contained in the mixture.

FIELD SEED OUTLOOK

Increased acreage of Clovers and grasses, shortage of home grown seed in various sections, substitutions of kinds because of relatively lower price, the low price of grain during the past year and depressed financial conditions are believed by the United States Department of Agriculture to be important factors which will make the demand for most field seeds this season equal to or slightly greater than last year.

In practically all of the states reporting a smaller demand for Red Clover, a greater demand for other Clovers, notably Alsike and Sweet, is shown, largely because of the relatively lower price of the latter. On the whole, however, the demand for each of Red Alsike, and Sweet Clover is expected to show about the same small percentage of increase.

The average increase in the demand for Alfalfa seed is greater than that of any of the Clovers and grasses, only three states—Colorado, Washington, and Idaho—indicating that the demand would be less than last year.

In the states reporting an increased demand for Timothy, dealers attribute such increase to the low price of the seed, the desire to increase the acreage sown to grass, and the smaller supply of home-grown seed in many sections. Kentucky Bluegrass is in poor demand for pastures because of the abnormally high price, but the indications are that the demand for lawns will not be reduced. The demand for Redtop also is expected to be less because of the high price while that for orchard grass will be practically unchanged.

A few states and districts report a prospective increased demand for millets because of a greater interest in dairying and live stock and a consequent demand for more hay. Reports indicate a slight increase in the demand for forage sorghum and an unchanged demand for grain sorghum seed compared with last year.

In all of the more important corn producing states the prospective demand for seed corn is about 5 per cent less than last year because the 1921 crop generally was of good quality and farmers were able either to save seed of their own production or to obtain their supply from other local farms. Reports indicate that efforts to reduce the corn acreage are having little or no effect on the demand for seed.

A falling off in the demand for seed wheat is noted in the New England States, New York, Pennsylvania, Oklahoma, and Texas, and an increase of 5 to 10 per cent in Michigan, Illinois, the Dakotas, and the Pacific Coast States. The prospective demand for seed oats is 5 per cent to 20 per cent

greater in most of the heavy producing states because much of the 1921 crop was light and chaffy and undesirable for seeding purposes. In many sections, however, there are sufficient stocks of 1920 crop seed oats to supply the demand. The demand for seed barley is affected by much the same conditions as seed oats.

KANSAS CITY SEED SITUATION

BY B. S. BROWN

Trade in seed generally has shown improvement the past few weeks, though demand for cane and Millet seed has generally been limited to feed manufacturing uses. Supplies of all grades are generally light and not much seed of any kind is offered in the country.

Moderate advances have been quoted in Alfalfa, Timothy, Clover and Sudan Grass, while Blue Grass, cane and Millet have been firmly held.

Prices for carlots from first hands, except where notes are: Alfalfa, per hundred weight, fair to good, \$11 to \$15; Timothy, per hundred weight, \$4.50 to \$5.50; Clover, per hundred weight, \$17 to \$22; Bluegrass, per hundred weight, cleaned, resale, \$30 to \$50; Millet, per hundred weight, German, \$1.25 to \$1.50; Siberian, \$1.20 to \$1.35; hog, \$1.50; other kinds, \$1 to \$1.25; cane, per hundred weight, nominally, 90 cents to \$1.25; Sudan, per hundred weight, nominally, \$2.50 to \$2.90.

AN ILLINOIS SEED HOUSE

Somewhere around 25 years ago J. M. Schultz entered the seed business in a small way at Teutopolis, Ill. With the years his business increased un-



SEED HOUSE OF J. M. SCHULTZ, DIETERICH, ILL.

til, needing larger facilities, he removed in 1914 to Dieterich, also in Effingham County, a few miles southeast of his first location. In the new place Mr. Schultz's business still grew, until he found it necessary to erect a new building which we are privileged to reproduce herewith. Now even this plant is too small, and he is making arrangements to build another large addition this summer.

The present building is strictly fireproof, 40x80 with four full floors, together with a warehouse 20x120, two floors in height. It is equipped with the best of seed cleaning machinery, and Mr. Schultz states that he recleans up to a purity to compete with any house in the country. He is located directly on track, giving excellent facilities for handling car lots as well as local lots of seed to the best advantage.

Mr. Schultz specializes in Timothy and Red Top. Located as he is in the heart of the Timothy producing section of Illinois, and also at the northern end of the Red Top section, where the quality of the latter is the heaviest, he is in a particularly favorable situation. In that section, the farmers harvest all their Red Top with binders, and in this manner avoid gathering the undergrowth and earth matter in their hay and seed. All these factors are of great benefit to the seedsmen, and Mr. Schultz has taken full advantage of them, as the healthy growth of his business so well testifies.

REFEREE SEED TESTING

The Research Committee of the Association of Official Seed Analysts is preparing the seed samples used by that association in its referee testing work. The set of 10 or 12 samples, all uniformly mixed and as representative as it is possible to make them, will be ready to be mailed this month.

During the past two years the seedmen who maintained their own testing laboratories have been invited to participate in this referee testing work.

The testing results of the six or seven companies who responded have compared very favorably with the best of the state laboratories.

An invitation is again extended to seedsmen to participate, and seeds of samples will be sent at request. Seedsmen who wish to have their analysts undertake the testing are urged to notify M. T. Munn, Seed Laboratory, N. Y. Agricultural Experiment Station, Geneva, N. Y. Mr. Munn is chairman of the association Research and Methods Committee and is again acting as referee for purity and germination testing.

SCARIFYING SWEET CLOVER SEED

The scarifying of seeds of Sweet Clover, which usually contains a rather high percentage—from 1 to 43 per cent—of hard seeds, has been advocated by the Department of Crops of the Ohio Agricultural Experiment Station. The planting of scarified seed gave a stand of 26 plants per square foot, while that of unscarified seed gave only 15 plants.

A seed scarifier was invented by Prof. Hughes of the Iowa State College some years ago. He obtained a patent on it but relinquished his rights so that the public might have the benefit. It consists essentially of a fan to create a blast of air which drives the seed against sheets of sand paper. This breaks the hard varnish coat, making the seeds permeable.

A modification of this machine permits the seed to enter the machine beyond the fan instead of going through the fan itself; this has been found to eliminate much of the tendency to break the seeds.

ONTARIO SEED GROWERS MEET

The Ontario Seed Growers' Association in its recent annual meeting decided to make an endeavor to secure preferential treatment in the matter of freight and express rates. The decision was made following the reports of several members showing apparent discrimination in the way in which the present system of rates works out. The stand was taken that a concession for seed such as the Association desires was in the ultimate interests of the railways by reason of the increased production which would be encouraged.

The Association also went on record favoring the sale of seed corn on the basis of grade solely, and a committee was appointed to take the matter up with the Department of Agriculture.

New officers were elected for the ensuing year as follows: Honorary president, Prof. W. J. Squirrell, Guelph; president, R. R. Moore, Norwich; vice-president, J. W. Sangster, Listowel; secretary and treasurer, F. C. Hart, Toronto.

WHERE THE CLOVER GROWS

Missouri needs more Clover, primarily because of its relation to soil improvement, says H. H. Krusekopf of the Missouri College of Agriculture. It is an established fact that most of the Clover is grown on the better soil types, and in the region of these the farmers are most successful in maintaining the productivity of their lands.

Among its other good qualities, the brown loess or river hill land is one of the best Clover soils in the state. It possesses this quality mainly because it is better supplied with lime than any other of the extensive soil types. Thirty-four Missouri counties in which the brown loess is extensively developed, grow 106,743 acres or 61.5 per cent of the total Clover acreage in the state. The average acreage of Clover per farm for the entire state is 0.66; while the average for the 34 counties containing loess soil is 1.3 or twice that of the state. These same counties contain 62 per cent of the Alfalfa acreage in Missouri, which gives truth to the saying that where Clover grows there Alfalfa also grows.

The more extensive use of lime for correcting sour soils, should result in a greatly increased Clover acreage. On much of the poorer land the use of a phosphatic fertilizer also is essential. A rotation including a legume every third or fifth year means that at least from 20 to 30 per cent of the tillable land must yearly be occupied by a leguminous crop.

GOOD SEED IS BEST BARGAIN

In promoting the production of improved field seeds on Missouri farms 59 counties co-operated with the Missouri College of Agriculture in 1921. Extension specialists in field crops personally inspected the fields and samples representing 109,793 bushels of farm-grown seed, and of this amount 28,330 bushels were approved and listed for sale. The amount actually sold for the farmers from these lists reached 21,286 bushels. For this seed the growers received \$23,571.15 more than the market value of the seed had it not been grown, inspected and approved for purity. The buyers of this seed, however, obtained at a nominal advance over market values, seed of better quality and adaptation than could possibly have been available from other sources.

"Consider further," says C. E. Carter, field crops extension specialist and secretary of the State Corn Growers' Association, "that the approved seed corn would plant 71,920 acres and the soybeans 10,437 acres, the wheat 8,262 acres, the rye 350 acres, the cowpeas 35 acres, and the Red Clover 1,020 acres. If

this pure seed replaced ordinary seed, it may very easily have increased the yield of corn 4 bushels, the wheat 5 bushels, and the soybeans 5 bushels to the acre. That meant an increase of 287,680 bushels of corn worth 35 cents a bushel, 52,185 bushels of soybeans worth \$2 a bushel and 41,810 bushels of wheat worth \$1 a bushel; or a total of \$286,868 for the buyers due to the use of approved seed."

CLOVER TREND HIGHER

"Clover ruled slightly higher this week," says Southworth & Co., under date of March 11. "Reached new high levels. Trade here is light. Good demand for March on moderate setbacks. March shorts are mostly hedges against cash seed.

"A few are stubborn and may wait until the last minute to remove hedges or make delivery. Longs to some extent will accept delivery and make shipment of their purchases. Small deliveries as yet on March contracts. Some demand for April. Offerings light. October a little easier on increased offerings. Dealers are reporting only a fair cash demand. So far not up to expectations. Probably be spasmodic from now until end of season. Seeding of Clover is in progress in some parts of Illinois and a heavy demand for high-grade Clover seed is reported. Some injury to Clover and Alfalfa fields is reported in Indiana and Wisconsin because of the unfavorable weather conditions. Pastures and ranges are improved generally by increased supply of moisture. Market could easily swing a dollar in either direction. Lack of or abundance of moisture in Winter wheat belt will have an effect on seed trade. Less abandonment less seeding will be done. Receipts 813 bags. Shipments 3,099 bags. New York reports imports 2,077 sacks. Stocks Clover in Toledo now around 9,000.

"Good demand for Clover here on spot. Better grades are wanted that can be cleaned to prime. Our advice is to consign now. When seed demand lets up it will have to be sold on basis of April or October. Ship yours now.

"Alsike weak. Demand is slow. Inactive trading. "Off grades of inferior quality are shunned by seed dealers. Receipts of this character have been increasing. Discounts have widened. Some will have to be carried over another season. On this account it is selling at low prices. Receipts 854 bags. Shipments 504 bags. New York reports exports 200 bags.

"Timothy is a shade lower than week ago, but in good demand. Heavy deliveries on March contracts. Some trading over to deferred futures. Receipts 161 bags. Shipments 179 bags. Baltimore reports exports 39,476 pounds. New York reports exports 3,223 bags."

SEEDS AGAIN ADVANCE IN NEW YORK

BY C. K. TRAFTON

Practically the entire list of field seed prices shows additional gains as compared with those prevailing a month ago. This has been partly traceable to the continued inadequate supplies of many varieties and further strong advices from primary markets regarding foreign descriptions. Moreover, although the weather has continued unfavorable in many sections, the seasonable awakening of demand is noticeable in some quarters. In the main inquiry is reported to be good and it is evident that numerous buyers are disposed to anticipate their requirements, evidently being impressed by predictions of a marked shortage of certain seeds. Hence the outlook is considered bright for a big spring trade.

Red Clover has scored a further advance of about 2½ cents in spite of materially larger arrivals, about 3,615 bags for the month, against roundly 2,515 during January. Still, this increase was really insignificant when we take into account the fact that the imports last season were 10,900 bags for February and 8,800 for January. The arrivals for the past two months were about 12,600 bags smaller than for the same months last year; and 1921 fell far short of the 1920 record as far as total arrivals were concerned. Moreover, there has been no change in the strong foreign situation. It is true, there was a striking increase in the imports from Italy, the total being about 2,075 bags, against only 200 in January, but it is asserted that little fresh business has been done, as seed bought now would not arrive soon enough for general market use, and moreover, shippers ask 19 to 20 cents c. i. f. New York compared with 18½ cents a month ago. The larger movement from that country is in line with the suggestion made in our February report to the effect that larger supplies would be needed from there, in spite of Government opposition, because of the great shortage of French seed. The latter country is still offering decidedly sparingly and asking 21 cents. The same price is named by German houses who again allude to the impossibility of executing many large American orders as spot stocks had been practically cleaned out.

Crimson Clover has continued to drag along without change of moment. Only one arrival was reported, about 160 bags from Germany. Export-

(Continued on Page 680)

ALL KINDS OF HAY WANTED

Under date of March 10, Albert Miller & Co., of Chicago say:

"There is a scarcity of everything in hay here at present and prospects are this condition will continue most of this month as road conditions in most sections of the country are very bad, making it difficult to load hay.

"Those, therefore, who can load should grasp this opportunity to market some hay at possibly better prices than will be secured on this market any time again this season."

HAY PRICES ADVANCE

The hay situation in Cincinnati for the past week has tightened up considerably. With light receipts and better shipping demand, prices have advanced from \$1 to \$1.50 per ton. There is no immediate outlook for an increase of receipts to this market, on account of the condition of the country roads, and by the time this condition becomes better, the farmers will begin to work in their fields. With all this in view, we do not see that there will be any decline in the hay prices here, in fact, we look for a continued steady advance.—T. M. Dugan & Co., Cincinnati, Ohio. Letter of March 11.

FEED MARKET AT BUFFALO

BY ELMER M. HILL

There has been some substantial price advances in the wholesale feed market in Buffalo within the last few weeks. All wheat feeds have advanced from \$1 to \$1.50 per ton and oil and cottonseed meals have been marked up about 50 cents. White Hominy has jumped 25 cents a day on several occasions. Latest quotations in the Buffalo market in carlots, f. o. b. Buffalo in 100-pound sacks were: gluten feed, \$36.50@37; cottonseed meal, 36 per cent, \$46@46.50; cottonseed meal, 46 per cent, \$51.50@52; oilmeal, 33 to 35 per cent, \$55.50@56; brewers' dried grains, \$35@35.25; standard Spring bran \$33@33.50; Hard Winter bran \$32.75@33.25; standard Spring middlings, \$33.50@34; choice flour middlings, \$35.25@35.50; white hominy, \$26.75@27.50.

ARRIVALS OF HAY LIGHT

In their letter of March 11, Toberman, Mackey & Co., of St. Louis, say:

The arrivals of hay on both sides of the river this morning were very light. The market is firm on everything. There is a good demand especially for the better grades of Timothy and Light Clover Mixed hay. We do not look for any increase in receipts and we expect the market to remain firm and a good inquiry prevail on the best grades of hay for the next 10 days or two weeks and we would advise shipments. It would be well to be cautious about shipping low grade hay to this market because our demand for this kind of hay is limited and it does not sell readily.

No choice Clover on the market. There is a good inquiry for same.

Good Prairie hay is scarce; lower grades plentiful and practically unsalable.

Choice Alfalfa in fair demand. Receipts have been slightly heavier and orders are not as plentiful as they have been heretofore.

Straw market quiet and dull.

HAY SITUATION AT ST. LOUIS

BY S. F. LARRIMORE

Receipts of hay at the St. Louis market during the past week have been very light, there being barely enough Timothy arriving to supply the requirements, offerings consisting mainly of poor Timothy, with some Alfalfa and very little Prairie. The Timothy market is strong and prices higher as a result of continued light receipts, and the demand is such as to readily absorb the arrivals at full prices. It is reported that there is very little hay in transit to St. Louis at the present time, and the outlook is for an increase in prices for the better grades at least. This will give farmers an opportunity to rid themselves of most of the hay they wish to market this season, as even the lower grades are steady, though quiet. It is an opportunity which may not occur again on this crop.

Light Clover Mixed is firm, with an active local demand for good No. 1 Light Clover Mixed. There is also a fair inquiry for the medium grades. Heavy Clover Mixed is quiet but steady, with a fair demand. Pure Clover is also steady, with very light receipts which are taken up almost immediately upon arrival here. The situation as regards to Alfalfa continues firm, with moderate receipts and the offerings are readily absorbed on arrival at full prices. There continues an excellent local de-

mand for high grade soft leafy Alfalfa, suitable for the dairy trade. The Prairie hay market is quiet though steady.

Hay prices in the St. Louis as secured by the Graham & Martin Grain Company, last week were as follows: No. 1 Timothy \$22@23; Standard \$21@22; No. 2 \$16@18; Light Clover Mixed No. 1 \$21@22, No. 2 \$16@18; Heavy Clover Mixed No. 1 \$18@19, No. 2 \$15@16; Pure No. 1 Clover \$21@22, No. 2 \$18@20.

LEGUMES AID IN CUTTING COSTS

Prof. A. C. Arny in charge of farm crops, at the Minnesota Experiment station, says that an increase in yield per acre of 39 per cent for wheat, 34 per cent for oats and 28 per cent for corn has been secured on University Farm from growing these crops in rotation with Clover above the yields secured from these same crops grown continuously. Manure was applied at the rate of two tons an acre each year both in the rotation and continuous cropping systems.

At these rates five acres of wheat in rotation produced as many bushels as seven acres cropped continuously to wheat; three acres of oats in rotation produced as many bushels as four acres devoted continuously to oats and four acres of corn in rotation produced more than five acres grown to this crop continuously. These results are similar to those secured at other places.

"This is ample evidence," says Professor Arny, "that legumes grown in rotation with grains and corn bring increases in yields per acre and in this way reduce cost of production and make for permanent agriculture."

HAY FIRMER IN NEW YORK; TRADE QUIET

BY C. K. TRAFTON

Barring a few brief flurries, the local hay market has been inactive during the month under review. During the early part of the period the undertone was somewhat easier as buyers generally were showing only limited interest. The majority of them were still grumbling about reduced consumption, as a result of which they claim that their stocks were sufficient to meet all requirements. Hence they were buying in the most sparing fashion, and only to fill urgent orders. At one time this attitude seemed logical enough, inasmuch as feeding was on a much smaller scale, hauling being practically impossible as the streets were in extremely bad condition as a result of freezing weather following a heavy snow-storm and rain.

For a time this indifference caused no uneasiness among receivers, the majority of whom remained fairly firm in their views. Their main argument was that receipts were not only lighter, but would soon show a still further decrease as invoices were coming in decidedly slowly. This was partly traceable to the cold and stormy weather which practically precluded the movement of hay from the farms and interior stations. In addition, of course, many interior holders were unwilling to accept current bids.

After a while, however, receivers began to weaken somewhat as the receipts, though by no means large, were more than adequate for the small demand. Moreover, the feeling became more general that milder, more spring-like weather was not far away, creating the belief in some quarters that farmers and country shippers would become more anxious to sell, as they usually do with the approach of the grass season. It was argued by some that the loosening-up of country stocks would be more momentous than usual this year, the opinion being expressed that reserve supplies are abnormally large because holders have been selling in such a niggardly fashion for so long a time.

Early in March conditions improved somewhat. Although business did not become particularly brisk, buyers were evidently more disposed to negotiate. On the other hand, holders became less anxious to sell, largely because the country continued to sell sparingly, and hence the arrivals were actually smaller, instead of larger as some had predicted. This was especially true of choice Timothy and Light Clover Mixed, which were in meager supply and most sought after by buyers. On the other hand, inferior grades were generally in excessive supply, just as they had been earlier in the season, and these were still somewhat of a drag on the market. This condition was still a source of considerable trouble to local receivers as many of the shippers, with exaggerated ideas as to the value of their hay, had drawn drafts far in excess of the sums that could be realized on their

consignments. Naturally, the financial negotiations necessitated by the readjustment of such overdrafts complicated matters considerably.

Throughout the month a number of conservative distributors have refused to modify their views as to the intrinsic value of hay, arguing that current prices were much too low in view of the fact that bran and millfeed were selling for at least \$7 or \$8 per ton more. They also called attention to the recent striking advance in corn and oats. The general improvement early this month is reflected in a general advance of, about \$1 per ton from previous low levels.

Straw prices have jumped up in a somewhat startling fashion, going to a big premium over hay prices, an exceedingly unusual occurrence. Demand has been fairly good and supplies decidedly meager. In fact, a near-famine has prevailed at times.

HAY DULL AT KANSAS CITY

BY B. S. BROWN

Dullness generally has prevailed in the hay trade the past few weeks. Receipts were moderate and as a rule did not include much choice hay and buyers were not especially anxious to take other offerings. Prices for Alfalfa have been inclined lower and are changed to about \$2 a ton down, compared with about three weeks ago. The better grades generally showed the largest losses. Prairie hay was scarce and maintained a firm tone, most grades advancing 50 cents to \$1.50. Receipts of Timothy and Clover were limited to a few cars a day and sold at about unchanged prices.

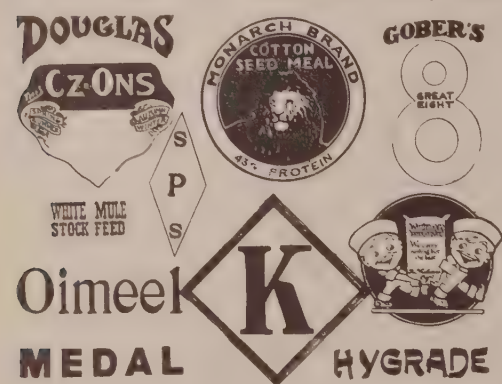
Receipts at Kansas City last month were 2,494 cars, compared with 2,033 cars the preceding month and 3,782 cars a year ago. Thus far this season arrivals have been about 2,500 cars less than in the corresponding time last year and compared with two years ago there has been a decrease of nearly 6,000 cars.

A better feeling generally prevails regarding the trade in the near future, due to the recent improvement in all grains and livestock. The South at present is the best buyer of Alfalfa and is expected to continue in the market until the latter part of the month, after which the North and East ordinarily are in the market. Aside from local demand, prairie is going largely to stock yard centers, especially St. Louis and St. Paul.

The Kansas City Hay Dealers Association in company with various retail merchants of Missouri is opposing the enforcement of an act of the last legislature requiring licenses and bonds.

NEW FEED BRANDS

"WIRTHMORE" poultry feeds, namely, scratch feed, mash feed, chick feed, intermediate chick feed, growing feed, cracked corn, oats, buckwheat, calf meal, Milo Maize, balanced ration, linseed meal, cottonseed meal, stock feed, molasses horse feed, hog feed, pigeon feed, wheat, wheat feed, plumb



barley, Yellow corn, molasses dairy feed, middlings, cornmeal, Alfalfa meal, Kaffir corn, pig feed, fancy Yellow rolled meal and bran. St. Albans Grain Company, St. Albans, Vt. Filed June 18, 1920. Serial No. 133,898. Published February 7, 1922.

"GOBER'S GREAT EIGHT" stock and poultry feed. Aviston Flour Company, Inc., Jackson, Miss. Filed August 9, 1921. Serial No. 151,571. Published February 7, 1922.

"OIMEEL" stock and poultry feeds. John Joseph Schreiber, Minneapolis, Minn. Filed July 20, 1921. Serial No. 150,672. Published February 7, 1922.

"CZ-ONS" cereals, wheat and rye flour, tapioca, sago, farina, and alimentary pastes. Baruch Cerf, Milwaukee, Wis., and Chicago, Ill. Filed September 15, 1920. Serial No. 137,211. Published February 7, 1922.

"MEDAL" wheat feed, stock feed, balanced ration. J. Cushing Company, Fitchburg, Mass. Filed April 19, 1920. Serial No. 131,307. Published and registered February 14, 1922.

"HYGRADE" poultry feeds, such as mash feed, linseed meal, Kaffir corn, cottonseed meal, flour middlings, balanced ration, Milo Maize, scratch feed, molasses horse feed, molasses dairy feed, pig feed, Alfalfa meal, calf meal, cornmeal, hog feed, growing

feed, baby chick food, stock feed, wheat feed and wheat bran, and gritless intermediate chick food, mixed feed. St. Albans Grain Company, St. Albans, Vt. Filed June 8, 1920. Serial No. 133,442. Published and registered February 14, 1922.

"SPS" all kinds of hay, corn, wheat, fresh fruits, vegetables. Edwin W. Knapp, New York, N. Y. Filed October 2, 1920. Serial No. 137,841. Published February 7, 1922.

"K" all kinds of hay, corn, wheat, fresh fruits and vegetables. Edwin W. Knapp, New York, N. Y. Filed October 2, 1920. Serial No. 137,842. Published February 7, 1922.

"WHITE MULE STOCK FEED," stock feed. The Buckeye Cotton Oil Company, Cincinnati, Ohio. Filed June 27, 1921. Serial No. 149,679. Published February 14, 1922.

"MONARCH BRAND" cotton seed meal. Ashcraft-Wilkinson Company, Atlanta, Ga. Filed June 25, 1921. Serial No. 149,618. Published February 14, 1922.

"DOUGLAS" corn gluten feed, and corn oil cake meal. Penick & Ford, Ltd., Inc., New Orleans, La. Filed April 18, 1921. Serial No. 146,330. Published and registered February 14, 1922.

Feed Trademarks Registered

151,875. Stock feed. Miller-McConnel Grain Company, Kansas City, Kan. Filed October 29, 1920. Serial No. 138,951. Published January 25, 1921. Registered February 14, 1922.

151,924. Hen feed, chick feed, laying mash and cornmeal. Richland Milling Company, Belleville, Ill. Filed June 18, 1921. Serial No. 149,356. Published October 4, 1921. Registered February 14, 1922.

151,941. Poultry feed. Security Mills & Feed Company, Knoxville, Tenn. Filed May 24, 1921. Serial No. 148,171. Published September 20, 1921. Registered February 14, 1922.

152,380. Cattle and stock feed. Samuel Preston Davis, Little Rock, Ark. Filed July 2, 1921. Serial No. 149,949. Published November 8, 1921. Registered February 28, 1922.

152,383. Alfalfa meal. The Denver Alfalfa Milling & Products Company, Lamar, Colo. Filed June 29, 1921. Serial No. 149,799. Published November 8, 1921. Registered February 28, 1922.

SCIENCE AND SYSTEM IN THE FEED BUSINESS

BY SHERMAN T. EDWARDS*

Science and system have revolutionized the feeding of animals on the farm. Not long ago 99 per cent of the animals and poultry derived their entire sustenance from the farms on which they were raised.

We recognize the importance and economy of using home grown products, such as Alfalfa, Timothy hay, Clover hay, corn silage and such grains as are needed on the farm, but when high production is considered, it is more economical for the farmer to sell his over-supply of grain which he is best able to produce, and buy such high class feeds as are made expressly for securing certain results. The feed manufacturers have recognized the steady advance of science and have profited thereby but the general public is slow to acknowledge those who have developed the commercial value of the discoveries made.

There is no question but that the agricultural colleges are a source of great benefit to the farmer, and that wonderful improvements have been made in the development of all products on the farm. Farmers can well afford to spend time with the colleges studying the principles of plant life, and the development, care and diseases of animals. It is the trouble we avoid that, after all, makes the added profit. The scientific feed manufacturers of the country have developed high grade combination of feeds, made from by-products and articles gathered from all over this country, as well as from foreign countries which will produce more growth, milk, meat and eggs than anything the farmer can possibly raise.

The day has passed when the farmers, through the country dairies, can supply the demands of the cities for dairy products. The enormous growth of the cities has made it necessary for large dairies to locate near the cities to supply the demands. It is out of the question for these dairies to own sufficient land to raise the products they need for cattle feeding so they must of necessity buy their feeds. These new, high class manufactured feeds, have been the means of greatly increasing their production over the old methods of feeding.

The big farmers in the grain sections of the country ship their produce to the terminal markets where a large percentage of goods is made into flour, cereals and food of all kinds for human consumption. The general public has little knowledge of the high quality of the by-products from these grains, and the valuable feeds developed from by-products. The interesting part of it is that many of these by-products are richer in food value than the natural grains, seeds and other products from which they are derived. They are at times cheaper

per ton, especially when the demand is heavy for the original articles that they are obtained from. The results secured are remarkable, amounting in many cases to 50 per cent increase in production over the old, one-grain feed, until today many high class manufactured feeds, on account of quality and price, have been going back to the farm at an advantage to the manufacturer and farmer alike.

We all know the value of bran, shorts and middlings, the by-products of wheat flour, which are excellent animal feeds. Besides the use of the natural grains that are on the market, following are some of the most prominent of the by-products used in the manufacture of scientifically mixed animal and poultry feeds, of which the public has known little:

Cottonseed meal, coconut meal, linseed oil meal and soybean meal, all of which are made from the residue or by-products, after the oil is extracted for human consumption or for commercial purposes, are four by-products which contain from two to four times more protein and fat than is contained in corn, oats or barley.

The manufacturers and dealers alike should pass on to the feeders and general public, the science and development of this business. I believe there are a good many dealers who are not sufficiently familiar with their products to explain them to the trade. Take for instance the by-products from the manufacture of sugar. From the sugar beet is obtained, first, a high-grade white sugar; then there are two remaining by-products, one known as "beet molasses" for animal feed, which contains practically 50 per cent sugar, is rich in carbohydrates and is an excellent article for mixing with grain and Alfalfa meal.

The other by-product is "beet pulp." This has been pressed, dried and ground, and is used principally for dairy feeding. With this should be classed the resulting by-product from sugar cane, after the white sugar has been extracted, known as "cane molasses." This is used the same as the beet sugar molasses, for animal feed. The sale of these products for animal feed has grown to a remarkable extent in the past 25 years. Millions of gallons are used annually for animal feeds and for the manufacture of vinegar, alcohol, etc., one concern reporting the sale of 75,000,000 gallons in a single year. Millions of gallons of this product which previously was run into the ocean, is now brought in tank steamers from Cuba to the States.

Gluten meal and gluten feed, which are made from corn, after the starch and corn sugar are taken out, contain from two to four times the amount of protein and fat than the natural corn has.

Wonderful results are being obtained from careful preserving, cooking, pressing and grinding of packing house products, or small pieces of the carcasses of animals that are not suitable for human consumption. These products are commonly known as tankage, meat meal, meat scrap and meat and bone scrap. They are cooked under high pressure of steam, a large amount of fat extracted, dried, pressed into cakes and ground. These products contain from 40 per cent to 60 per cent protein and from 5 per cent to 6 per cent fat, and are dried so they will keep indefinitely. They are one of the sources of high protein in manufactured feeds, especially for poultry and hogs. Considerable animal bone is also used, which is dried and ground into meal, and is also used as bone charcoal for feeding animals and poultry. Study these subjects carefully and drive them home to the trade.

Another product that is used quite extensively on the Coast is fish meal, made from the by-products of the fish industry, and which contains from 40 per cent to 50 per cent protein, and 8 per cent to 11 per cent fat. This product is used mostly for poultry feed mixtures. It is dried, pressed and ground, and, when properly made, will keep as well as the meat products above referred to.

The most recent and, I believe, the greatest discovery of the age along these general lines, was made by Prof. E. V. McCollum of Johns Hopkins University, Baltimore, in his study of nutrition. About 1914 Prof. McCollum came out with an announcement that the combination of the fat in milk, and water of leaves from leafy plants, added to a balanced feed, would greatly add to the assimilation of a feed. The use of milk for feeding animals was out of the question on account of the cost, so attention was directed to buttermilk.

While buttermilk is considered an excellent feed, it has been hard to obtain, hard to handle, and would not keep, and when the large creameries gradually moved to the cities, it made it still more difficult for the farmer to obtain buttermilk for animal feeding. It was quite impossible to move the liquid buttermilk to the farmer at a reasonable cost, so millions of gallons were allowed to go to waste.

One of the most noted and beneficial by-products developed in the past few years is dried buttermilk. This product has been dried to a powder the color of cream and contains 30 per cent to 35 per cent protein, and from 5 per cent to 8 per cent fat, or is five times richer in protein and twice as rich

*An address delivered at the midwinter meeting of the Eastern Federation of Feed Merchants, at Binghampton, N. Y., February 15, 1922.

COAL

COAL BUREAU IN CHAMBER OF COMMERCE

The Natural Resources Production Department of the Chamber of Commerce of the United States has announced the formation of a Coal Bureau, which will deal with business problems affecting such industries as coal, oil, timber, etc. The new bureau will compile data and information of coal production and consumption. The work of the Bureau will be placed under the direction of C. T. Starr who has for years been engaged in the operating end of the coal business.

DISTRIBUTION OF COAL CARS

Arguments were presented in the Supreme Court on March 7 by Attorneys Rush C. Butler and Frank E. Harkness for the National Coal Association in suit in which the coal operators are seeking to require the Interstate Commerce Commission to change the system of distribution of empty coal cars on car shortage days to the mines. The lawyers contended the rule permits railroads to segregate an unfair proportion of cars for their coal, thus limiting the cars available for commercial coal and resulting in higher prices. Opposing arguments were made by R. B. Fletcher and A. G. Gutheim of Chicago.

THE COAL SITUATION

Reviewing the coal markets for the week ending March 11, *The Black Diamond*, Chicago, said:

"The indifference of both the domestic consumer and the smaller buyers of industrial coal to the impending strike continued during the last week to make itself manifest, this even in the face of further warnings sent out by the Government, state bodies and trade associations that there was every reason to believe that there would be a suspension of coal mine operations April 1.

"These classes of buyers either are already well stocked, or are prepared to go without coal during the period of suspension. In certain sections of the country, where cold weather has been prevalent, there has been a fair demand for domestic coal, but the orders generally have been for small lots.

"Export trade conditions are practically the same

as last week, with the outlet at tidewater being practically cut off. Coal that usually goes into the export trade is now being diverted to the Central West, and, as much of it is mined at the nonunion wage scale, it is interfering with local production in the territories to which it is being shipped; these fields, being on the union scale, find themselves unable to meet the prices on the eastern coal."

LOSSES OUT OF EACH TON OF COAL

A writer in the *American Review of Reviews* a short time ago presented some figures on the losses and actual utilization from each ton of coal mined, which if accurate, show a waste that is almost unbelievable to the layman. Out of each 2,000 pounds of coal he figures the following amounts are lost: In mining, 600 pounds; in transporting, 80 pounds; in gases going up smoke stack, 446 pounds; by radiation, 51 pounds; unburned in ash pit, 51 pounds; in converting the heat energy into mechanical energy, 650 pounds. This totals 1,878 pounds or nearly 94 per cent. The writer estimates that after deducting those losses which cannot be fully obviated, the practicable preventable losses are about 75 per cent.

TO AID COAL MEN

In a statement regarding the coal and coke section of the Fuel Division of the Bureau of Foreign and Domestic Commerce, F. R. Wadleigh, head of this division said:

"The coal and coke section of the Fuel Division of the Bureau of Foreign and Domestic Commerce has been organized and is in existence for the purpose of assisting every branch of the coal and coke industries in promoting and increasing their business, both foreign and domestic.

"The Bureau of Mines is co-operating in this work and in the selection of subjects and problems that call for both technical and commercial consideration and investigation—commercial engineering—coal storage, purchase and selection of coal—sampling and preparation, inspection, methods of use, both industrial and domestic, new fuels and processes, etc.

"Closely associated with all of these activities and vital to their success is the problem of education of all interested in the industries—but mainly of the great coal buying and using public. The necessity of educating the coal purchasing public, both industrial and domestic, in the problems of the coal industry is of paramount importance today. We believe that a clear comprehension of the outstanding facts of the coal industry by the business men of

the country will do much to clarify the present confused state of the public mind, and be instrumental in creating an understanding and attitude of fairness which will be of distinct benefit to the coal industry and the country at large.

"To make our work of the greatest possible value, we want your assistance and co-operation. Let us know how we can help you, how we can best obtain concrete and definite results. Give us your advice—give us your problems—put us in a position to assist you—but understand that there is no question of regulation or obligation involved.

"We want to give service and ask only that you work with us and help us in our efforts."

COAL PROFITS IN 1921

Tonnage produced, average costs and prices per ton received for bituminous coal, f. o. b. mines, mine-run basis, by 654 operating companies reporting to the National Coal Association, by months in 1921, according to data introduced by the National Coal Association in hearings before the Interstate Commerce Commission, February 28, 1922, were as follows:

Month	Production	Received	Cost	*Margin
January	13,760,621	\$3.64	\$2.09	\$0.55
February	10,580,327	3.49	2.26	.23
March	10,505,457	3.42	2.28	.19
April	9,235,059	3.19	2.26	—07
May	11,754,664	3.06	2.91	.15
June	11,754,664	2.96	2.91	.05
July	9,946,896	2.92	2.90	—08
August	11,384,236	2.88	2.80	.08
September	11,474,324	2.79	2.74	.05
October	14,175,260	2.72	2.55	.18
†November	10,669,823	2.67	2.72	—05
‡December	7,941,392	2.56	2.90	—34
Total	133,409,233	\$3.04	\$2.94	.10

*Margin is not the same as profit. From the margin must be paid all Federal income and excess profits taxes and interest on bonds and borrowed money.
†Six hundred and thirteen companies only.
‡Five hundred and eleven companies only.

To deal in coal and grain, Robert Downey Company has been incorporated at Oswego, N. Y., capitalized at \$105,000. R. A. Downey and J. W. Downey are the incorporators.

The business of the Consumers Coal Company at Waynesboro, Pa., has been purchased by H. Wallace Craig of Mercersburg. He will assume charge of the retail coal and feed business.

The B. H. Alden Coal Company was recently incorporated at Worcester, Mass., and will handle coal, grain, hay and feed. The firm is capitalized at \$300,000. The incorporators are: Burton H., and Etta L. Anden and Anna M. Holley.

Fort Dearborn Coal Co.

CHICAGO

Quality Coals and Quality Service

The Better Grades from Eastern and Western Fields

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Quality—Service—Finance—100 Per Cent

BUY YOUR COAL NOW

We urge you to place your orders for Coal immediately so as to be insured of prompt delivery and at prevailing prices.

On this page are to be found several reputable coal concerns who are in position to serve you.

DO NOT DELAY—BUY YOUR COAL NOW

IF IT'S COAL YOU WANT WE CAN GET IT FOR YOU

WE SHIP FROM THE BEST FIELDS—

Pocahontas, New River, Anthracite, Eastern Kentucky, Southern Illinois and Indiana. Also by-product coke. All carefully sized and cleaned—for furnaces, stoves or grates.

WE ALSO HANDLE STEAM SIZES

C.M. MODERWELL & COMPANY

INCORPORATED

Branch Office:
McKnight Bldg., Minneapolis



General Offices:
Peoples Gas Bldg., Chicago

FIELD SEEDS

(Continued from Page 677)

ers there state that supplies have been practically exhausted and it does not seem likely that they will be able to ship additional quantities of moment. Practically nothing has been offered by France or Italy.

Alfalfa has also remained virtually unchanged. Because of the short domestic crop demand has been active enough to absorb much larger arrivals from Argentina, roundly 2,425 bags, compared with 235 in January. Moreover, shippers in that country are not offering freely even at 13½ cents to 14 cents c. i. f. New York and the impression prevails that they will have less to export than previously supposed.

Timothy has failed to move far in either direction, a condition which has evidently caused considerable dissatisfaction in some quarters in view of the much larger exports, roughly 5,215 bags, compared with about 990 in January. Of the February total Germany got about 1,025 bags on one steamer; while the United Kingdom took about 3,200, including one cargo of 2,330. On the other hand, our crop was large and it is evident that the country was well loaded up. Alsike has gained about 1 cent, largely because of the buoyancy in Red Clover. Otherwise there has been no feature, export business still being lacking in spite of the strength in sterling exchange.

Grasses have again advanced in spite of continued dullness; both Kentucky and Canadian Bluegrass being 3 cents higher. It is interesting to note that the 1921 crop of Bluegrass was not only the seventh consecutive short crop, but was actually the smallest on record, only 175,000 bushels, comparing strikingly with the record yield of 1,500,000 bushels in 1912. Exports were only 235 bags, against 250 in January. Redtop has gained about ½ cent. Exports were 320 bags, against 200 in January. Orchard Grass has remained unchanged with arrivals of only 108 bags from New Zealand. As suggested in our last review, nothing came in from Denmark, which shipped us 300 bags in January. Rye Grass has advanced ¼ to ½ cent; there was some increase in the arrivals, the total being 450 bags, compared with 175 in January, but the European situation remains strong, as outlined in our January report. Hairy Vetch remains firm as only 99 bags arrived from Germany, shippers there stating seed is coming to market in decidedly small quantities. White Clover has continued dull and unchanged with arrivals of 75 bags, compared with 60 in January.

Rapeseed has been firm with little heard of foreign offerings. The month's arrivals were only 110 bags, whereas 2,083 were imported during January. Sunflower has been inactive but firm. Argentine is not offering new crop seed and it is evident that the old crop is practically exhausted.

Arrivals from that country were much larger—3,725 bags, against 1,610 in January. Canary has likewise been firm in the face of much larger importations from Argentina—5,050 bags, against 260 during January. Fresh business has been slow with shippers quoting 3¼ to 3½ cents c. i. f. New York. An interesting item was found in the import statistics during the month; namely, the arrival of 1,124 bags of Red Millet from Japan. The same steamer brought 625 bags of hemp seed.

SEED NEWS FROM MILWAUKEE

BY C. O. SKINROOD

The large shipments of Clover seed and the fairly large receipts of Timothy seed were among the most outstanding items in the seed report of the Milwaukee Chamber of Commerce for the month of February.

The receipts of Clover seed at Milwaukee for the past month were 380,188 pounds as compared with 70,480 pounds for the corresponding month a year ago and shipments were no less than 1,760,917 pounds, as compared with shipments of 740,069 pounds a year ago. The shipments were therefore almost five times as large as the receipts.

The receipts of Timothy seed for the past month were also of unusual proportions with 831,402 pounds, as compared with receipts a year ago for the same period of 210,000 pounds, and shipments were 266,527 pounds as compared with 299,081 pounds for the same month a year ago. These figures indicate that receipts were about three times as large as shipments.

Summarizing, the past month shows fair receipts of Clover and large shipments, while in Timothy receipts were large and the shipments were rather light.

A branch house and sales department has been established by the Courteen Seed Company at Twin Falls, Idaho, in charge of Walter A. Lohr. This aggressive seed firm will enlarge its trade in the Pacific Northwest, in fact in the entire western region by means of this new move.

The official seed market of the Chamber of Commerce for the past month points out that the seed trade was very strong and in active demand. The purchases of the Milwaukee seedmen and shippers were on a liberal scale all month and took care of fair sized offerings.

Among the big price advances were the gains of \$1 to \$2 in Red Clover, a rise of 31 cents a

bushel for flax, Timothy market ranging from steady to 50 cents higher. The Red Clover market ranged in the past month from \$15 to \$23, Alsike sold at \$11 to \$16, White Clover went from \$30 to \$40, and No. 1 Northwest flax ranged from \$2.20 to \$2.51 a bushel. Poor to good Timothy sold from \$4 to \$6 and, the choice to fancy from \$5.50 to \$7.25.

Henry Michels, one of the leading seed experts of Wisconsin declares that Wisconsin should logically increase its Clover seed output to meet the big demand. Mr. Michels points out that the average annual production of the state is 300,000 bushels of Clover seed, having a value between \$3,000,000 and \$4,000,000. As a cash crop, he says it is becoming more and more important every year.

A recent farmer's sample received at the university seed laboratory had the following noxious weeds per pound: Perennial sow thistle, 3378, Canada thistle 102, dodder 92, and quack grass 17. This was declared worse than the average sample, but it was pointed out that all seed buyers should make a special effort to deal with reliable seedmen to avoid weed troubles.

Prof. R. A. Moore of the College of Agriculture reports that the co-operation of the members of the Wisconsin Experiment Association is making possible the filling of many full car load orders for seeds of pure bred seed grains. One grower in the southern part of the state, Mr. Moore says, has just shipped out his fourth car load of pure bred seed corn of the Murdock and Silver King varieties. Seed houses in several states are getting car lots of pure bred Wisconsin seeds, according to Prof. Moore who says the seed trade is getting more and more into the pedigreed class.

A movement is on foot in Wisconsin for a national seed law so that definite standards would be established for imported seeds as well as those of domestic seeds. Farmers' organizations in the state as well as leading seedsmen and dealers are expected to support the plan for a national seed regulation law.

The Milwaukee Seed Company reports that the great scarcity of Red Clover, especially the high grades, is steadily becoming more apparent. The result is, the company adds, that prices have greatly advanced and "we are now paying from \$20 to \$25 per 100 pounds." High grade Alsike is also scarce, says the company. Prices are given at \$14.50 to \$18, the company reports. As to Timothy, the company says country offerings are not large, but there is a heavy tone in the market and the demand is only fair. Higher prices are looked for however, within 60 days.

On account of the advancing markets on Clover and Alsike, Alfalfa has also gone up, especially the native grown seed, says the Milwaukee Seed Company. Prices of Alfalfa range from \$15.50 to \$18.50. The company concludes its report on seed trade conditions as follows: "Small trade orders are enormous. We expect still higher prices on Clovers of all kinds because states such as New

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Milwaukee, Wis.

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Imported Clover and Alfalfa Seeds

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Grain, Clover and Grass Seeds
CHAS. E. PRUNTY

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BUYERS — SELLERS: COW PEAS, ALFALFA, SWEET CLOVER, SUDAN, CANE, MILLET, SUNFLOWER AND ALL FIELD SEEDS

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Agricultural Seed Company

Representing 57 Years Continuous Seed Service

1303 N. Main St.,

St. Louis, Mo.

SEED

We buy and
sell all varieties
of grass and
field seeds

The Albert Dickinson Co.
MINNEAPOLIS CHICAGO

York, Pennsylvania, and the upper half of Ohio, Indiana and Illinois as well as such states as Iowa, Michigan and Wisconsin, all big Clover buyers, have not started to fill their requirements as yet."

A brisk spring trade in seeds is the report of the outlook given by the Courteen Seed Company. The offerings are said to be limited in most lines, while demand is strong. The company quotes Red Clover at \$25 to \$27 with the choice grades scarce. Alsike is also said to be in limited supply with prices at \$15 to \$18. Alfalfa is reported firm at \$18 to \$20, with the best grades scarce while White Blossom Sweet Clover is in fairly good supply at \$7.50 to \$8.25. The Timothy supply is reported as fair with prices at \$5.50 to \$6.90.

The North American Seed Company also finds that business is very active, in fact so good that it seems likely to continue its present rate of activity for six or eight weeks. The supply is reported scarce in all lines except Timothy, with an excellent demand. And Clover is quoted at \$20 to \$25, Timothy at \$6 to \$7, Alsike at \$14 to \$18, high grade Alfalfa very scarce at \$15 to \$20, and White Blossom Sweet Clover \$8 to \$9, with an advancing market.

The Kellogg Seed Company also finds great activity in the seed market, with prices growing firmer and demand steadily increasing. Supply in many cases is said to be light. Prices are given at \$23 to \$26.50 for Red, Alsike at \$14 to \$20, Timothy at \$6 to \$7.25, Alfalfa at \$16 to \$20, and White Blossom Sweet Clover at \$7.50 to \$9.

C. B. Woodson is the new president of the Georgia-Florida Seed Company of Cordele, Ga.

Field seeds are now being handled at Mound City, Kan., by the Blaker Lumber & Grain Company.

Stewart & Redd succeed Hamon & Redd in the seed and implement business at Cynthiana, Ky.

Robert J. Gunson & Co., of Rochester, N. Y., are succeeded in business by the Gardner Seed Company.

A 75-foot addition has been built to the warehouse of the Sweeney Seed Company of Mt. Pleasant, Mich.

A seed department has been established by B. F. Gill & Co., of Oklahoma City, Okla., with W. O. Kueck in charge.

The name of the Emery-Scott Seed Company of New Albany, Ky., has been changed to that of the Scott Seed Company.

A new seed store has been opened at Glenwood, Iowa, by T. O. Eller. He is handling a complete line of seeds and nursery stock.

The storage house and garage of the D. O. Coe Seed & Grain Company at Topeka, Kan., which burned recently is being rebuilt.

A new seed pea warehouse is to be erected at Helena, Mont., this year by the Western Seed Company of Missoula, Mont.

A seed store has been opened in Grand Rapids, Mich., by Wilbur Luikens and John Shipper as the Holland-American Seed Company.

Manfred Meyberg and Walter Schoenfeld have purchased the interest of M. L. Germain in the Germain Seed Company at Los Angeles, Calif.

The Fayette County Farmers Union has purchased the seed and implement business of C. M. Marshall & Co. of Lexington, Ky. They will operate as a co-operative store.

A branch warehouse and sales department has been opened at Twin Falls, Idaho, by the Courteen Seed Company of Milwaukee, Wis., under the management of Walter A. Lohr.

A new seed store has been opened at Atlanta, Ga., by John C. McMillan under the name of the McMillan Seed Company. All kinds of seeds, plants, bulbs, fruit trees, etc., will be handled.

To handle field seeds, food supplies, etc., the Direct Supply Company has been incorporated at Madison, Wis., capitalized at \$25,000. The incorporators are: John Hirsig and Anna L. Hirsig.

I. Laplante, Arthur J. B. Cartier and J. Frank Smith have incorporated at Fall River, Mass., as the Fall River Implement & Seed Company. The firm will handle seeds, implements and grain. The firm is capitalized at \$15,000.

The seed, hardware and farm implement business of the late A. M. Strong at Syracuse, N. Y., has been purchased by B. F. Metcalf & Son, Inc., and will be continued under the name of Metcalf & Son, Inc. The company occupies a five-story fireproof building.

Larger quarters are now occupied by the Porter-Walton Company of Salt Lake City, Utah, a seed and plant firm. It occupies the store at Richards Street and West First South Street, formerly occupied by the now defunct Our International Co-operative Institution.

A wholesale field seed business has been opened at Sioux City, Iowa, by Haley-Neeley Company. The company has houses at Huron, Mitchell, Aberdeen and Sioux Falls, S. D., and Carroll, Iowa, and Norfolk, Neb. The company operates on a wholesale

basis and handles a full line of field seeds and grasses.

D. Peck is now with the World Seed Company of Milwaukee, Wis. He was formerly with W. H. Small Company of Evansville, Ind.

H. L. Holmes, George A. Gorgas and C. C. Conklin have incorporated, capitalized at \$5,000 at Harrisburg, Pa., as the Holmes Seed & Nursery Company.

Charles H. Breck has retired from business and resigned his position as president and director of Joseph Breck & Sons Corporation of Boston, Mass., which handles seed, plants and nursery stock. He transferred his interest to his son and son-in-law, who with his brother, will continue the business.

For Sale

MACHINERY

WANTED

Dry batch mixer of about one-half ton capacity. Write giving price and detailed condition to C. F. Box 2, care AMERICAN ELEVATOR AND GRAIN TRADE, Chicago, Ill.

FOR SALE

Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator bolts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, Kansas City, Mo.

FOR SALE

Type Y 25-horsepower Fairbanks-Morse Crude Oil Engine; one 30-horsepower Chicago Pneumatic Crude Oil Engine. A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

OIL ENGINES FOR SALE

60-horsepower Fairbanks-Morse.
50-horsepower Otto.
25-horsepower Fairbanks-Morse.
50 other sizes.
A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

BAGS

FOR SALE—BURLAP BAGS OF EVERY KIND

New or second-hand, plain or printed with your brand; seamless cotton grain bags; sample bags: burlap, cotton, sheeting, or paper for car lining, etc. Wanted: Second-hand bags; best prices paid. WILLIAM ROSS & CO., 409 N. Peoria St., Chicago, Ill.

HELP WANTED

WANTED

Experienced man to operate cleaning machinery in grain elevator or seed house. E. S. H., Box 3, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

Preston Lansing

"Ship-Lap" Tile Blocks
Build stronger bins. Protect against fire, rot, moisture and decay. First cost is only cost. Write today for special circular.
J. M. Preston Co., Dept. 426, Lansing, Mich.

Hunt Coupling for Controlling the Stretch of Manila Transmission Ropes



Ask for Descriptive Catalog M-15-1
C. W. Hunt Co., Inc., West New Brighton, N. Y.

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

WANTED

To hear from owner having elevator, mill or other property for sale. Give cash price and particulars. JOHN J. BLACK, Chippewa Falls, Wis.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

FOR SALE AT A BARGAIN

Fine new frame building, size 56x600x20 ft. high. This is erected on heavy cement piers; has composition roof; wired with power and electric lights; within the city limits of St. Albans, Vt., on our own land, 120x950 ft. Tracks on both sides on which 31 cars can be spotted at warehouse at the same time. Nice office with steam heat. Through rates on grain, hay, feed, etc., can be obtained from the West and Canada to all New England points under a transit privilege. Easy terms. A. N. DERINGER, INC., St. Albans, Vt.

RAILROAD CLAIMS COLLECTED

WE COLLECT RAILROAD CLAIMS covering loss or damage to grain, flour and mill products. Do not overlook delay, shortage, decline in market and deterioration claims. We have an extensive organization for handling these matters. References: Any Minneapolis bank or the *Northwestern Miller*. We are members of the Grain Dealers National Association and the Traffic Club of Minneapolis. This service is furnished on a percentage basis. No collection, no pay.

THE SECURITY ADJUSTMENT COMPANY,
1132-1156 Builders Exchange Bldg.,
Minneapolis, Minn.

A MAN

Wanted.—A practical feed man. One acquainted with both manufacturing and marketing. We have a partly equipped plant and want to put in additional machinery to make a small up-to-date plant to take care of local and nearby territory. Most of the grain necessary can be bought locally or near by. Manufacturing transit arrangements can be had on four through line railroads leading to all points. Splendid location in one of the best cities in Indiana. Ample capital, although we prefer a man who can make a fair sized investment to guarantee his best efforts and permanency of position. This is a rare chance for the proper party. PRACTICAL FEED MAN, Box 3, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

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STACKS
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Mail us sketches
or blue prints for
prompt estimates.

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930 W. 19TH PLACE CHICAGO, ILL.

Hay, Straw and Feed

(Continued from Page 678)

in fat as whole milk. It is totally digestible and is rich in vitamins and lactic acid. There is 92 per cent to 93 per cent water in liquid buttermilk so you can readily see the remarkable strength when reduced to dried form. This article will keep in definitely in any ordinary warehouse and is easy to handle and ship. It is marketed in bags and barrels, much the same as flour and grain.

Dried buttermilk, when combined with other articles, has been without question the means of developing more remarkable results in increased weight, and building of baby animals, than anything that has ever been placed on the market. The drying of buttermilk simply removes the moisture and leaves all other properties intact. You may hear remarks that the drying process affects the lactic acid and lowers the value of the buttermilk but my experience in the use of 9,000,000 pounds of dried buttermilk in animal and poultry feeds throughout the United States, has shown such remarkable results that I am convinced this is wrong.

(TO BE CONTINUED)

The feed business of F. T. Sanford at Brookfield, Mo., has been purchased by C. Sheats.

The feed business of J. T. Milton at College View, Neb., is now the property of F. J. Harrison.

George Roden is no longer in the feed department of B. F. Schwartz & Co., of New York, N. Y.

A feed and flour business is to be conducted at Pawhuska, Okla., by Jasper Rogers and J. C. Wolford.

The feed and seed business of London & Krupensky at Fremont, Neb., has been sold by them to H. Cohn.

A new building costing \$25,000 is to be erected at Dayton, Ohio, for the Powers-Holbert Feed Company.

A 50-horsepower gasoline engine has been installed in the feed mill of L. A. Baldwin at Evansville, Wis.

W. T. Hedrick succeeds E. R. Blickenstaff as manager of the LaVerne Feed & Fuel Company of LaVerne, Calif.

George Taylor's feed store at Stamford (South Jefferson p. o.), N. Y., has been purchased by the Crawford Bros.

On February 7 business was started in the warehouse of Peter Jacobs & Co., feed and flour dealers of Kenosha, Wis.

A modern molasses mixed feed plant has been completed at Pine Bluff, Ark., for the Whyte Commission Company.

The interests of the Bowden Bros., feed dealers at Crete (Lynn p. o.), Ind., have been taken over by the Crete Elevator.

A feed business was opened on February 1 in the Pacific Garden Warehouse at Kent, Wash., by N. B. Shaffer and L. B. Colby.

The K. C. Feed Store at DeQueen, Ark., has been purchased from Smith & House by George Clingan. He will continue the business.

C. A. Mills and E. C. Stein have purchased an interest in the feed business of C. C. Wright, Son & Co., at Owosso, Mich., and with W. S. Wright will have

active charge of the business. C. C. Wright, organizer of the company, continues to have his financial interest in the firm.

Newman & Smith of Cynthiana, Ind., are succeeding in the feed, flour and coal business by Henry F. Deig. J. O. Smith is manager.

Curran & Kurka have sold the North End Feed & Grocery at Phillips, Wis., to A. E. Young. Mr. Young took charge February 10.

The feed business of G. A. Flenner at Elk City, Okla., has been purchased by Rother & Slanka. Mr. Flenner will enter the produce business.

The property of the Farmers Feed & Supply Company at Centralia, Wash., has been purchased by the Kenworthy Grain & Milling Company.

L. E. Morrison of Cabeen, Mo., has purchased the feed and seed business of M. F. Wilkinson at Nowata, Okla. Mr. Morrison will take charge.

A 75-ton feed grinding plant has been purchased from the Nurdyke & Marmon Company by the General Commission Company of Kansas City, Mo.

W. W. Teel is now in business at New Orleans, La., doing a wholesale feed and hay business. The firm operates as the Case-Teel Company, Inc.

A wholesale feed and flour business is to be conducted at Fort Smith, Ark., by B. M. McCurry and J. S. Watts under the name of Watts & McCurry.

The flour and feed business which has been conducted at Bloomfield, Ind., by Vest & Combs has been dissolved. Mr. Vest retired from the partnership.

J. F. Clausen, Otto Gradert and J. P. Murphy have incorporated at Bryant, Iowa, as the Bryant Shipping & Feed Company. Its capital stock is \$10,000.

The National Seed Products Company of New Albany, Ind., has been purchased by N. V. Trautman. He is doing a jobbing and retail feed and meal business.

The Universal Feed Company has been incorporated at Dallas, Texas. Its capital stock is \$40,000. R. F. Duggan, R. J. Coke and M. O. Andrews are interested.

A feed and flour business has been started at Minneapolis, Minn., by Henry Meyer under the name of the Meyer Trading Company. Offices are at 212 Corn Exchange.

H. A. G. Hutchinson, A. A. Osteen, and W. C. Keith have incorporated at Beaumont, Texas, as the Hutchinson-Osteen Feed Company. Its capital stock is \$15,000.

The Marshall Flour & Feed Company has been organized at Cohoes, N. Y. F. W. and L. B. Marshall and J. W. Byron are interested. The capital stock of the firm is \$50,000.

A large addition has been completed to the plant of the Ubiko Milling Company of Cincinnati, which engages extensively in the manufacture of scratch feed and molasses feeds.

The feed store of V. E. Bond at Darby, Pa. has been purchased by Woodward & Co. The company now conducts 11 stores in Philadelphia on the cash and carry plan.

Thomas S. Lilly is now conducting the business at Cape Girardeau, Mo., which was formerly conducted by the Lilly & Maybrey Flour & Feed Company. The latter firm has been dissolved.

The stock and good name of the Shanks-Phillips Company at Memphis, Tenn., dealers in feed and flour, have been purchased by the Clayton-Hughes

Company of Memphis, Tenn. The Clayton-Hughes concern handles the flour of the Eisenmeyer Milling Company of Springfield, Mo.

The Conroe Provision Company of Conroe, Texas, will engage in the wholesale feed and flour business with H. B. Sellman manager. The company has purchased the United Grain Store there.

R. J. Stretch & Co., feed and flour dealers of Monroe, Wash., are overhauling their plant. The Seattle branch of the J. J. Ross Mill Furnishing Company of Seattle is doing the work.

The plant and business of the Stockyards Milling Company of Oklahoma City, Okla., have been purchased by the Eddie Feed Company of Oklahoma City. The firm will continue the feed mill.

The feed department of Blamberg-Bixler Company, Baltimore, Md., has been equipped with a Bauer Attrition Mill. It will be used for the manufacturing of mixed poultry and livestock feeds.

The McDonald Flour & Feed Company has been incorporated at Fort Dodge, Iowa, capitalized at \$30,000. O. C. Plaff is president; Ben P. Larson, vice-president and E. A. McDonald, secretary-treasurer.

The business of the Jackson Grain Company at Cedar Rapids, Iowa, has been purchased by Joseph Sinaiko of Madison, Wis., who will engage in the manufacturing of feeds under the name of the Iowa Milling Company.

To deal in feed, fertilizer, fuel, etc., the Produce Service Organization, Ltd., has been incorporated at Chicago, Ill. The firm is capitalized at \$1,200. Ellis D. Whipp, Harry R. Ready and Louis V. Mahany are interested.

James C. Roberts, P. C. Pate and H. L. Connell have purchased the holdings of the Emmett Compton Grain Company at Springfield, Mo. The name of the firm has been changed to the Queen City Feed & Flour Company.

To deal in feed and flour, and to conduct a milling business, Oscar A. Anderson & Co., were incorporated at Palmyra, Wis. The capital stock of the firm is \$40,000. A. L. Ives, A. E. Buckson and F. W. Clemons were interested.

Stuart Hyde has purchased an interest in the McMillan Company of Ft. Wayne, Ind. Mr. Hyde was for 20 years prominently identified with the mixed feed business. The McMillan Company manufactures a high grade mixed feed.

Feed is to be handled on a large scale by the Llano Brokerage Company of Llano, Texas, which will occupy the building formerly occupied by the Hendricks Produce Company. M. M. Hackworth is president; D. E. Hackworth, secretary.

A new feed store has been opened at Evansville, Ind., for the Charles C. Klenck Company. The new firm is composed of Charles C. Klenck, V. J. Lutz. The company will conduct a general jobbing business in hay, straw, millfeeds and grain.

Extensive repairs have been made to the elevator, warehouse and mill of the Universal Feed Mills of Forth Worth, Texas. Modern separating and cleaning machinery has been installed; the warehouses have been enlarged and the elevators overhauled, making them up-to-date in all particulars.

A wholesale company for dealing in hay and straw has been organized at Los Angeles, Calif., by W. E. Starr and O. K. Ericsson. Mr. Starr was formerly with the Homan & Starr of Lodi, Ohio, and Mr. Ericsson was in the hay department of the Nicholls-Loomis Company of Los Angeles, Calif.

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Udike Grain Co., consignments.
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DES MOINES, IOWA.

Des Moines Elevator & Grain Co., grain merchants.*
Mid-West Consumers' Grain Co., grain merchants.*
Taylor & Patton Co., grain merchants.*

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Dumont, Roberts & Co., receivers, shippers.*

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White Grain Co., grain and hay.*†

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Moon-Taylor Co., grain, feed and hay brokers.*†

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Steinhart Grain Co., grain commission.*
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Witt, Frank A., grain commission and brokerage.*

KANSAS CITY, MO.

Davis Grain Co., A. C. grain commission.
Moore-Lawless Grain Co., grain receivers.*
Moore-Seaver Grain Co., corn and oats.*

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Wilson Co., Jno. R., corn, oats, mill feeds.

LYNCHBURG, VA.

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MEMPHIS, TENN.

U. S. Feed Co., receivers and shippers.*†

MIDDLEPOINT, OHIO

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MILWAUKEE, WIS.

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Bell & Co., W. M., shippers.*
Blanchard Grain Co., grain merchants.*
Courteen Seed Co., seeds.
Donahue-Stratton Co., buyers and shippers.*
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Milwaukee Seed Co., seed.*
North American Seed Co., seed.

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McCaull-Dinsmore Co., com. merchants.*
Quinn, Shepherdson Co., grain merchants.*

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Dewey & Sons, W. W., grain commission.*
Harrison, Ward & Co., receivers and shippers.
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*†
Mueller Grain Co., receivers and shippers.*
Turner-Hudnut Co., grain commission.*

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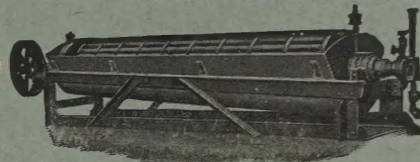
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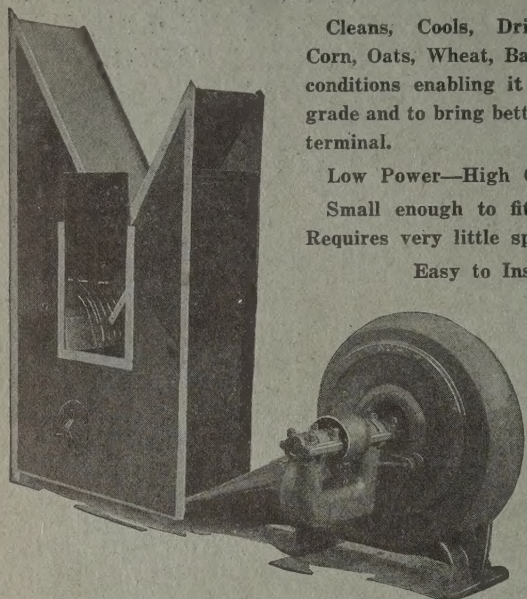
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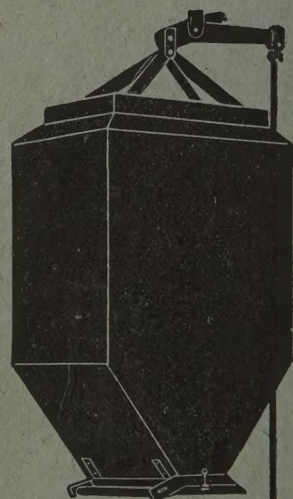
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